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RAILWAY AGE

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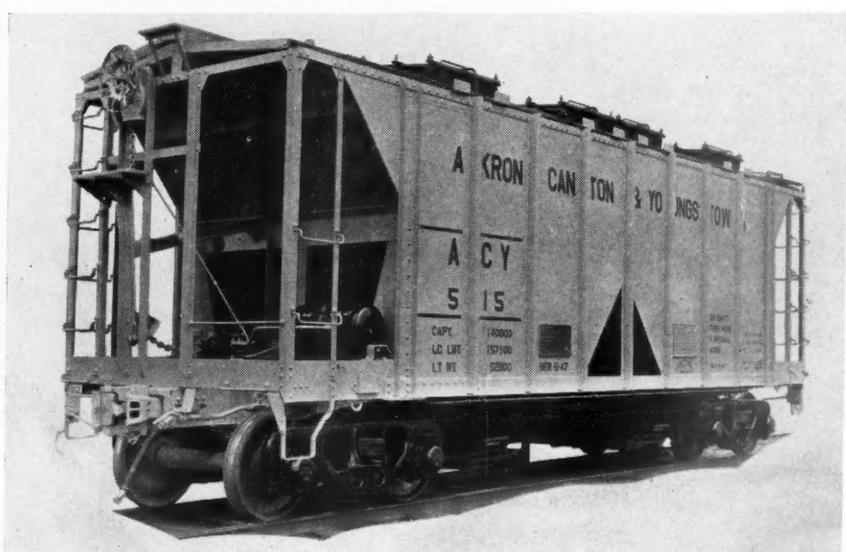
"ROLLER FREIGHT" CARS NO PROBLEM IN INTERCHANGE, REPORTS AKRON, CANTON AND YOUNGSTOWN RAILROAD



Over two years ago the Akron, Canton and Youngstown Railroad purchased from American Car and Foundry Company 25, 70-ton covered hopper cars equipped with Timken roller bearings. These cars are used for hauling soda ash to Akron and Barberton, Ohio, from points as far west as Texas. They have operated in regular interchange service on the following 34 railroads and go through regular hump yard procedure.

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A. & S.	C. of Pa.	D. & T. Shore Line	K. C. Term.	P. R. R.	T. T. R.R. Co.
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A. C. L.	C. & E. I.	E. J. & E.	M. P.	P. & W. Va.	W. Md.
B. & O.	C. B. & Q.	G. M. & O.	Mun. & Wes. R.R.	Reading Ry.	W. & L. E.
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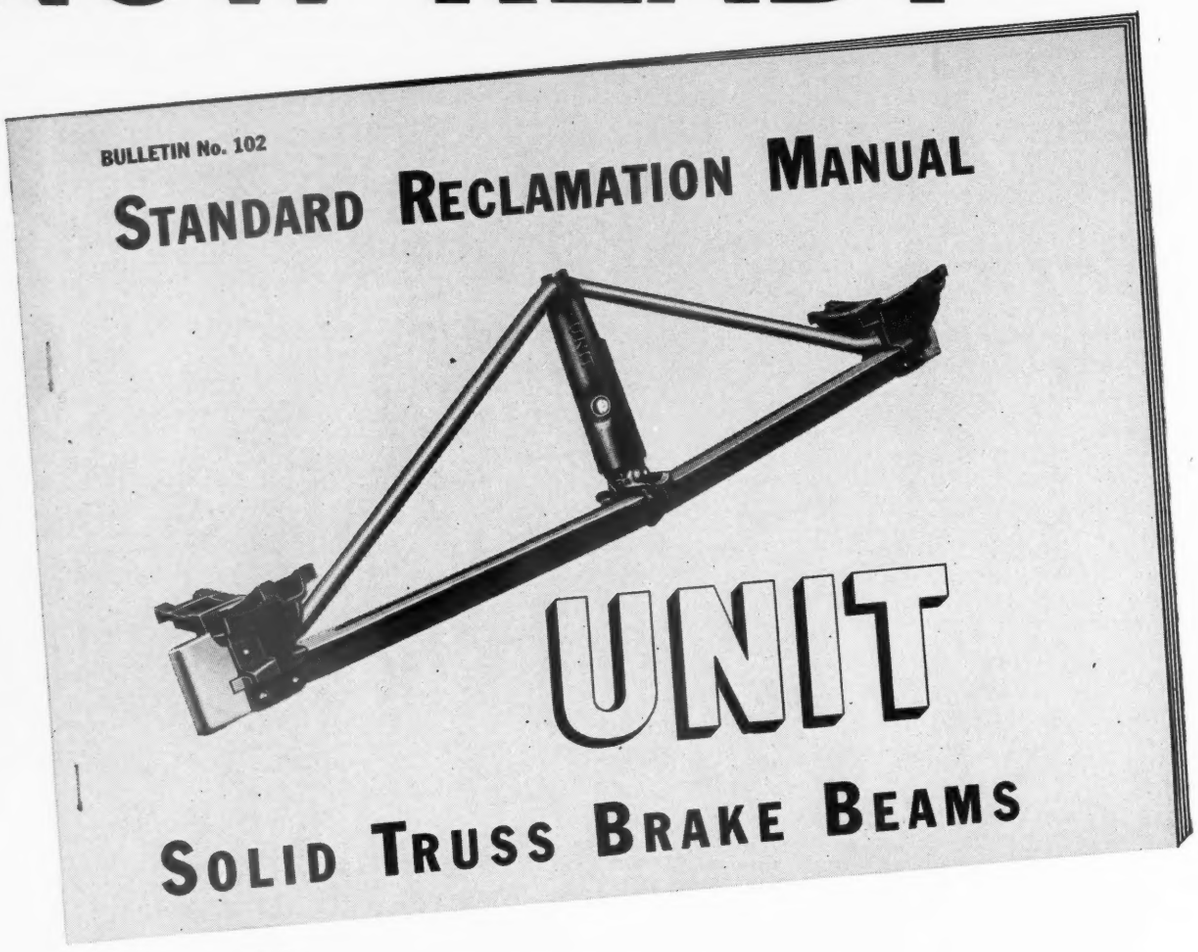

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Vol. 125, No. 16 October 16, 1948

RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office.

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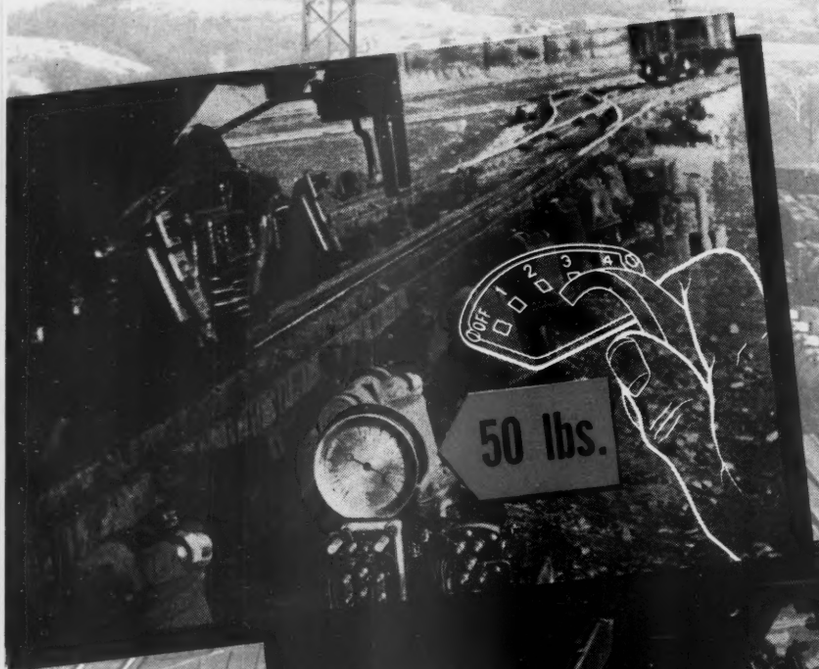

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WEEK AT A GLANCE

"PALATABLE" RATES: The task of making higher prices for railroad service, or anything else, "palatable" to the users thereof, may seem impossible. Nevertheless, in an article beginning on page 63, W. B. Saunders, transportation consultant, suggests that shippers will more readily see the advantage of accepting higher charges if the resulting earnings are linked to specific expenditures for reducing costs and improving service. Publication of this article is especially timely in view of the fact that the railroads, as reported in our news columns, are asking the Interstate Commerce Commission for a 13 per cent boost in freight rates, with an immediate interim increase of eight per cent.

GOOD PACKAGING CUTS FREIGHT CLAIMS: Good packaging of freight under supervision of qualified industrial packaging engineers is helping to cut down freight claims, according to A. L. Green, special representative, Freight Claim Division, Association of American Railroads, who was one of the speakers at the recent four-day Chicago meeting of the Industrial Packaging Engineers' Association. Other speakers of special interest to railroad men were W. H. Roehrig of the Atchison, Topeka & Santa Fe; C. E. Swanson, Chicago, Burlington & Quincy, and R. C. Sell, Koehring Company. Their remarks are summarized in an article beginning on page 65.

ACTUAL VS. "POTENTIAL" TRAFFIC: A gloomy picture of actual vs. "potential" railroad freight traffic is presented in a recent Interstate Commerce Commission study, summarized on page 71. The study shows that the railroads in 1946 hauled only 85.7 per cent of the freight they would have hauled if they had maintained the same relative position they occupied as carriers in 1928. We commend this study to the careful attention of railroad officers and employees alike; and suggest that they read in connection with it our news report of an address to the American Mining Congress by O. W. Tuckwood, general traffic manager, American Smelting & Refining Co., who sheds considerable light on some of the reasons behind the relative decline in rail traffic.

NEW "CENTURIES": Previous issues of *Railway Age* have reported the installation by the New York Central on its "Twentieth Century Limiteds" of completely new cars, built by Pullman-Standard. An eight-page illustrated article, starting on page 54, describes this new equipment in detail and includes a full list of the many manufacturers who furnished various specialties.

NEW CARS FOR C. & O. TOO: On Monday, October 11, in a special press run from New York to Philadelphia, Pa., the Chesapeake & Ohio displayed some of its new passenger equipment, which includes many interesting and unusual features not heretofore associated with railroad travel. Pictures of some of these features appear on page 67, and our news columns contain a summary of comments made by C. & O. Chairman Robert R. Young at a press conference during the trip. A more detailed description of the new Budd-built cars will appear in a later issue of *Railway Age*.

"PRO-RAILROAD"—NOT "ANTI-LABOR": The fact that justified criticism, however vigorous, of misguided union policies does not make *Railway Age* an "anti-union" or "anti-labor" publication is the theme of this week's leading editorial. This magazine is definitely pro-railroad; we believe that one of our principal functions is to point out again and again that the various interests in the railroad industry—management, labor, investors, shippers—must work *together* for the common good.

SHIPPERS SEEK PREWAR STANDARDS: Better merchandise service, more gondola cars, and repeal of minimum load restrictions were the most important desires expressed by shippers at the 12th annual meeting of the National Association of Shippers Advisory Boards at St. Louis, Mo., on October 5. A full account of the meeting, with summaries of the various addresses and resolutions, begins on page 68. Speakers included Carl Giessow, association president; William T. Faricy, president, Association of American Railroads; Colonel J. Monroe Johnson, director, Office of Defense Transportation; Arthur H. Gass, chairman, Car Service division, A.A.R.; J. Carter Fort, vice-president and general counsel, A.A.R.; Frank J. Rebhan, association vice-president, and Irving M. Peters, traffic manager, Corn Products Refining Company.

DIESEL WATER STATIONS: A "packaged" water-pumping station for Diesel locomotives, which combines the advantages of low first cost and economical maintenance, is described on page 62 by A. C. Hauser of the H. K. Porter Company. The installation is particularly suited to use in sparsely-settled territory with inadequate municipal water supplies.

NEW UNIT FOR ERIE "NAVY": Of special interest to engineering officers of those roads which operate marine equipment is the article beginning on page 72, written just before his recent death by A. A. Visintainer, late engineer of structures for the Erie. In this article, Mr. Visintainer describes the Erie's new floating dry dock, designed under direction of railroad officers and built by the Dravo Corporation. The new dry dock is expected to save both time and money in underwater maintenance and repair of most of the floating equipment used by the Erie in New York harbor.

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IT ISN'T ANTI-UNION TO BE PRO-RAILROAD

A number of union members who are readers of *Railway Age* have written to protest against what they call "anti-labor" editorials recently appearing in these pages. This paper is pro-America, pro-freedom and pro-railroad. It is not "anti-" anything which is a necessary factor in making efficient railroad service possible; and labor is certainly one of those factors—along with management, investors, suppliers of materials, regulatory agencies, and purchasers of transportation service.

Investors Being Starved Out

If investors in and owners of the railroads were taking unprecedented returns out of the properties in interest and dividends, while keeping wages at such a low level that adequate forces to operate the railroads were unobtainable, then we would be drawing critical attention to the behavior of those investors, as harmful to the railroads and the national welfare, and as injurious also to their own welfare, in the long run. Such criticism would not make us "anti-investor," and neither are we "anti-labor" when the shoe is on the other foot and we comment adversely upon policies and practices of the railway unions which are starving out the investors to the injury of the industry as a whole.

Specialization in production—or "division of labor," as the economists call it—has gone so far in this country and has been going on so long that people are constantly forgetting that parts and departments of an industry are interdependent; none of them can prosper for long by practicing cannibalism on the other parts. Right now, the investment factor in providing railroad service is being starved out, and this situation should be a matter of concern, not only to the investors themselves, but to all the other interests in and around the railroads, including organized railway labor.

It is the duty of those concerned, as this paper is, with the welfare of the railroads *as a whole*—rather than of only one factor or segment of the industry—to call attention to what is going on. The railroads cannot be operated efficiently, for long, when they persist in paying investment capital too little to induce it to seek employment in the railroad industry. The railroad unions ought to be just as worried about the unattractiveness of railroad securities to investors as management or shippers or suppliers of railway equipment, because, to the extent that the industry starves for lack of capital, railroad employees will suffer from unemployment just as shippers will suffer in service, and suppliers will suffer from a dearth of orders from their customers.

One of the reasons that investment capital is reluctant to enter the railroad industry in adequate quantity is that the unions have established a polit-

ically effective prior claim, not only to a high level of wages, but also to a lot of wage payments for work not done and for unproductive labor. This paper criticizes such policies and practices by the unions, not to disparage the importance of labor to the railroads or to do injury to railway employees, but in obedience to its primary obligation to defend the health of the industry as a whole, including that of all of its parts.

Investment Anemia

Another reason, in addition to the policies of the railway unions, why the investment factor in the railroad industry is suffering from anemia—harmful in the long run to everybody connected in any way with the railroads—is the political support many shippers have given to the construction of toll-free superhighways and inland waterways, and the reluctance of some shippers to pay compensatory rates for railroad service. This paper has had a great deal more to say in criticism of such behavior by shippers than it has said of the parallel short-sighted policies on the part of the railway labor organizations. No one has, however, because of this criticism of shippers, sought to label our expression as "anti-shipper." Shippers, it would appear, are not as sensitive to constructive criticism as some union members, nor so confident of the infallible wisdom of their official spokesmen.

Still another cause for investors' lack of enthusiasm about the railroads—besides the activities of shippers and unions—is the lack of concern of the regulators and the administrative and legislative branches of the government for the effect of their activities on the supply of capital to the railroads. There has been plenty of criticism in these columns of the shortcomings of government in its treatment of the railroads; but such comment certainly does not make this paper an anarchist organ. Government has a proper, vital and indispensable role to play in the successful functioning of the railroads, and the effort of a close observer to give warning when it wavers in the performance of its legitimate functions does not constitute treason, but is the essence of effective patriotism.

A team of mules cannot pull together if one of them is overfed and the other is starved. A locomotive will not operate if overloaded with fuel but short on lubricants. The country cannot be run for the exclusive benefit of farmers, or investors, or politicians, or labor—because too much favoritism of one part will slow down or stop all the other parts; and no one part can feed and clothe and defend the country unless all the other parts cooperate. A railroad cannot be run exactly as the engineering department would like to run it, with no consideration of the needs of the mechanical, operating and traffic departments. It cannot be run entirely as the investors, or shippers, or regulatory authorities, or labor would like to run it, either.

With all the specialization in production there is, and has to be, in this country—and all the special pleading, all the short-range and selfish objectives of exclusive groups—there needs to be a lot more attention devoted to the educational job of pointing out how and wherein the parts have got to subordinate themselves to the whole. This is one of the principal, and indeed indispensable, functions of such an independent industrial publication as *Railway Age*. We intend to continue the performance of this duty, with complete confidence that it is a valuable service even to those who complain loudest against it. It is not conscientious critics of union practices who will tempt these organizations into lean pastures, but the cynical and self-serving yes-men who applaud everything they do, however foolish.

MANAGEMENT'S INTEREST IN P. & S. UNIT LOAD CAMPAIGN

The campaign of the purchases and stores departments to have more material shipped to storehouses in unit loads is not a matter, merely, of departmental convenience—but has possibilities of value to the railroad industry quite beyond prospective operating economies. The activities of the p. & s. department in this direction are furnishing the railroads with a laboratory of increasing importance, from which they can get some idea of the extent to which the unit load principle is applicable in shipping carload lots; and to what degree unit load shipping will have to be done on pallets and in palletized containers.

It is particularly important that an answer to these questions be found quickly, both for the benefit to the railroads themselves in handling their own supplies and as a means of finding an intelligent course of action to pursue toward shipper requests for rate concessions on pallets under load and for the return of empty pallets.

Many difficulties must be surmounted, however, before the purchases and stores department achieves its goal of maximum possible use, by suppliers, of the unit load in shipping. This fact is recognized by many p. & s. men. They realize that, if they are to receive unit loads, many a supplier must be shown how their use will be a saving *to him*. In some cases this will necessitate showing him how its use in intra-plant handling will cut his costs. Then he must be convinced that, as a ship-

ping device, it will also be helpful to him. This may be fairly easy where the supplier can make unit loads without pallets, but where the pallets are necessary, a real obstacle is facing the p. & s. man, because frequently neither the railroad nor the shipper is willing to pay the freight charges on the pallets, in either direction.

This objection arises because freight charges, where they have to be paid, generally more than offset the savings in handling expense to both parties. Thus the purchases and stores departments are placed in the position of asking the supplier to "save us money by shipping on pallets," while being unable to pay the freight charges on the pallets and hoping that the shipper can absorb them in some way. Either both parties must be able to effect overall savings by shipping on pallets, where they are necessary, or there is no logic in the p. & s. position and the objective never will be achieved. If the p. & s. people cannot satisfy themselves and their suppliers that overall savings can be made by both parties, the campaign for palletized shipping had better be dropped—that is, unless p. & s. can demonstrate to management that rate concessions on unit load shipping will benefit the railroad industry as a whole.

Whatever the course, the p. & s. department has a big job ahead of it—one large enough to require the *full-time attention of a section of these departments.* (An organization within the stores department to give all its time to the problem of increasing materials handling efficiency was suggested in these columns, June 26, 1948.) This problem involves the careful marshalling and analysis of much factual information, which is a job individuals seldom do adequately unless it is made an assignment of primary importance. The welfare of the industry is sufficiently involved to make the situation one worthy of top management's careful attention.

We are right back where we started from in 1887. The first Interstate Commerce Act was passed to prohibit discrimination in transportation. From then to the 1920s regulated common carriers handled 92% of the passenger traffic and 86% of the ton-miles.

With the development of highways, waterways, and air ports since 1920, the automobile has taken over most of the passenger traffic. Shippers purchased trucks, barges, ships, etc., and went into the transportation business for their own account.

Now, in 1948, 92% of the passenger traffic and 38% of the ton-miles are handled by private and contract carriers—directly competitive with the regulated common carrier.

The higher the cost of common-carrier transport, the greater the diversion of traffic to private and contract carriers.

Hence, those shippers, farmers and basic industries, who are *required* to use common carriers are now paying in the level of *their* rates for this accelerated loss of traffic to private and contract carriers. Further, these shippers are paying the *full* cost of emergency stand-by facilities and for the national defense.

This is one fundamental phase of the present transportation problem.

—Transportation Association of America

RAIL SHORTAGE BECOMING A MENACE

It's time the railroads began demanding more adequate rail deliveries. There is nothing to be complacent about in the deteriorating rail situation and keeping quiet about it will avail nothing. The railroads and the car manufacturers have said a lot about the need for more steel for freight cars, and they have doubtless got a lot more steel than they would have if they had said nothing. They have been greatly helped by the Office of Defense Transportation, and by the support of shippers. The need for larger allotments of steel for rails should be regarded with the same seriousness as the need for car steel.

Ever since the beginning of the recent war, the railroads have been rail-hungry. During the war they got far less than their requirements—for obvious reasons. Since the close of the war, while carrying record peace-time traffic, they have been deprived of adequate rail for less obvious, or at least far less important reasons. During this latter period, with deferred renewals accumulating to an amount variously estimated at between two and four million tons, they have done everything possible to prolong the service life of rail, but the limit of stretching is in sight, and alarmingly close on many lines.

Under even normal conditions this insufficiency of rail could become serious. In the light of the tense international situation, which could create a military emergency overnight, thrusting new loads on both the steel producers and the railroads, the present unfavorable rail situation, with little hope for correcting it speedily under the best conditions, could prove disastrous.

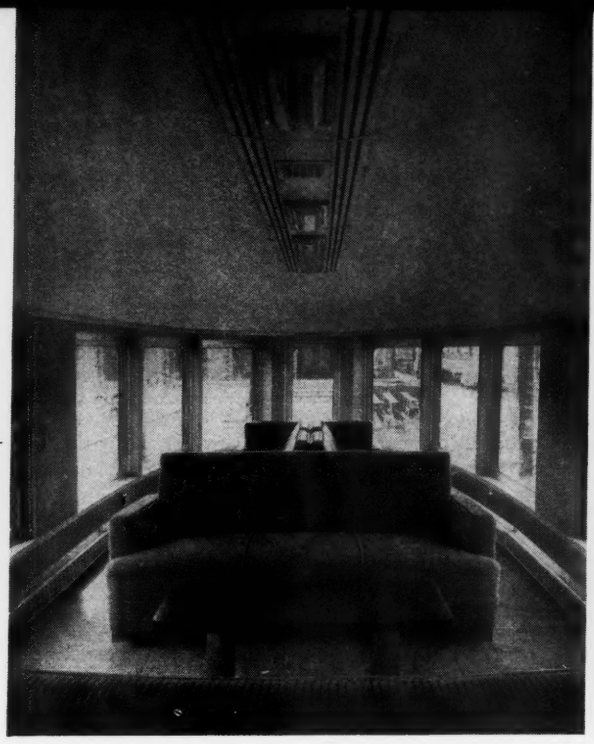
So important is this matter that it was made the highlight of a recent press conference with President Faricy of the Association of American Railroads in St. Paul, Minn., who emphasized that, along with freight cars, rail is the greatest present physical need of the roads. And the roads should have this rail now, he said—now while labor is generally available to lay it. Come an emergency, he continued, with its certain shortage of manpower, and any amount of rail might then not meet the situation.

One reason for this potential crisis in rail is that railway engineering and maintenance officers have been too quiet about the inadequacy of their rail receipts. It is time for them to insist that the railroads, as a vital industry, receive the rail they need.

NEW YORK CENTRAL'S "TWENTIETH

As part of its 86-million-dollar, postwar, new passenger-equipment program, the New York Central inaugurated on September 15, with appropriate ceremonies at New York and Chicago, two completely new "Twentieth Century Limited" trains. This event was reported in the *Railway Age* of September 18. Each of the new trains, normally comprising about 16 all-room sleeping cars, built by the Pullman-Standard

Large rear observation windows and streamlining of the Lookout Lounge car



Left — The observation end of the Lookout Lounge car. Right —The double step-up from cocktail section to raised Lookout Lounge

CENTURY LIMITED" TRAINS ARE NEWLY EQUIPPED

Each of two new streamline all-room "Centuries," including Diesel locomotive, cost about two million dollars

Manufacturing Company, and an Electro-Motive 4,000-hp., two-unit Diesel locomotive, cost about $2,000,000. The cars, constructed of welded low-alloy high-tensile steel, were designed by the car builder in co-operation with New York Central engineers, and the interior decorative treatment was developed by Henry Dreyfuss, industrial designer, New York.

Sleeping accommodations on the new 16-car "Century" comprise 137 units with 253 beds. In addition to the railway post-office car, equipment in the train includes the following types: 22-roomette; 10-roomette and 6-double-bedrooms; 12-double-bedrooms; a full-length diner; kitchen-dormitory; lounge-barber-secretary, or club car; and 5-double-bedroom-lounge-observation, called the "Lookout Lounge."

The new "Century" is said to provide the longest stretch of train radio-telephone service in the world, operating all the way between New York and Buffalo, N. Y. The cars are equipped with an intercar dial telephone and a public-address system, pneumatic and electric-eye operated doors, and foam rubber mattresses. In the all-room sleeping cars, each room has circulating ice water, electrical appliance outlets, and lavatory (washing) facilities. All bedrooms (not roomettes) have, in addition, separate toilet-lavatory rooms, connected to each room. Porters have their own sleeping accommodations in each car. A train secretary and barber are available.

All lighting is fluorescent, direct or indirect, operating on a special N.Y.C.-designed circuit from a 64-volt battery system without motor alternator or other converter. T-12, 15-in., 14-watt and T-8, 12-in., 14-watt bulbs are used almost exclusively.

Lighting Equipment

The lighting in the sleeping cars was developed through close collaboration between New York Central and Luminator, Inc. The fixture finally developed is similar to a luminous moulding and is located in the corner directly over the seats. The high-intensity beam of light is directed through a clear condensing lens to the reading plane, while the diffused area immediately above the lens provides the general illumination for an extremely cheerful interior.

Lighting in the bedroom with the bed crosswise consists of a five-light unit in the form of a letter L. It is so wired that when the occupant of the upper berth wishes to read, he can turn out the four bulbs running across the car and use only the short length fixture directly over his head as a night reading light. Provision is made for a blue night light as well. For the

lower berth, a new type of reading light fits on the surface of the wardrobe. This unit serves not only for night occupancy, but for day use as well.

In the bedroom with the bed in a longitudinal position, there is a two-lens unit with four lamps for the general illumination in this space. On the pier panel is a new fluorescent reading light for day use. In addition, both the upper and lower berths have night reading lights. In the toilets, a fluorescent unit is placed across the top of each mirror.

In the roomettes, the same type of fixtures used in the bedrooms are located over the passengers' heads, while on the other partition there is a similar unit located between the mirror and the parcel rack above. A night reading light has been provided back of the folding bed.

Full-Length Diner and Kitchen

The diner is a full-length car, seating 64 persons. It is divided into five separate sections. In the center section is dining space for 24 passengers on continuous leather serpentine seats along the walls. At either end of the main dining section, separated by winged partitions, are four dining tables. At one end of the car is additional dining space; the other end section is furnished with built-in settees where passengers may enjoy cocktails before meals.

In developing the light system for the diners, the low ceiling at each end of the car has been extended into the main dining section along each side and across the ends to conceal the fluorescent lamps which illuminate the high ceiling. The ceiling itself appears to float on a continous vertical band of luminous glass going around the car in a rectangular pattern, giving extra visual height to the car. Over each table is a pair of Luminator lenses that give additional direct illumination on the tables.

Connected to the dining car is a kitchen-dormitory car, with an electric-eye door-opening mechanism for waiters carrying loaded trays, to speed service. The entire kitchen is of stainless steel. Behind this large kitchen is the dining-car-crew dormitory, sleeping 15 persons.

The kitchen and dining cars are equipped with Frigidaire electric refrigerator and an electric dish-washing machine is installed in the kitchen.

All refrigeration is mechanical. The refrigerators include a low-temperature cabinet for ice cream and frozen foods, and a large provision refrigerator, in which is an isolated box for storage of sea food. In the pantry is a dairy and cheese box, a refrigerated storage bin for ice cubes and a large vegetable box, refrigerated by two ice-cube freezing units. In the dining-room car is a large beverage refrigerator, also cooled by two ice-cube freezing units.

Filtered fresh air is supplied to the kitchen by a centrifugal blower, through a duct near the ceiling opposite the range. A frost-proof steam radiator, controlled by a manually-operated steam valve tempers the incoming air during the winter. A propeller-type fan draws air from the pantry into the kitchen which causes a movement of air from the entrance to the dining room.

At the rear of the warming ovens over the range ducts lead up to a single centrifugal type exhaust fan which draws air over the top of the range. Centrifugal exhaust fans are also installed above the steam table and the dish washer. All fans are controlled by a single three-position switch, so that the air intake and exhausts will always be in balance.

The range and broiler have stacks which are equipped with an aspirator drafting device developed by the New York Central. A centrifugal blower fan supplies air to aspirator nozzles which are set in the stack so as to increase the draft.

Club Car

At the front end of the club car is a completely equipped barber shop with valet (pressing) facilities, attended by a barber, and a shower bath. Behind the barber shop is a train secretary's office, with full equipment, including a dictaphone. Here passengers are offered complete secretarial services, free of charge, by the train secretary in attendance.

The lighting in the club car has been designed around a large wall mirror so that reflections in the mirror make the car appear twice its normal width. The effect of a large rectangular luminous ceiling has been created by using the vertical space between the two-level ceiling to apply a continuous row of Luminator lenses and give a high level of glareless, shadowless light over the center section of the car. Elsewhere, individual seats are lighted by fluorescent units in the ceiling over each seat.

A booth next to the secretary's office features radio-telephone service, where passengers may phone their office or home while the train is running both ways between New York and Buffalo. Prices range from 30 cents for the local area in which the train is running, to daytime person-to-person long distance phone rates. The distance over which this service will be available is 435 miles. Later, as additional radio-telephone stations are built, service will be extended the remaining 525 miles between Buffalo and Chicago.

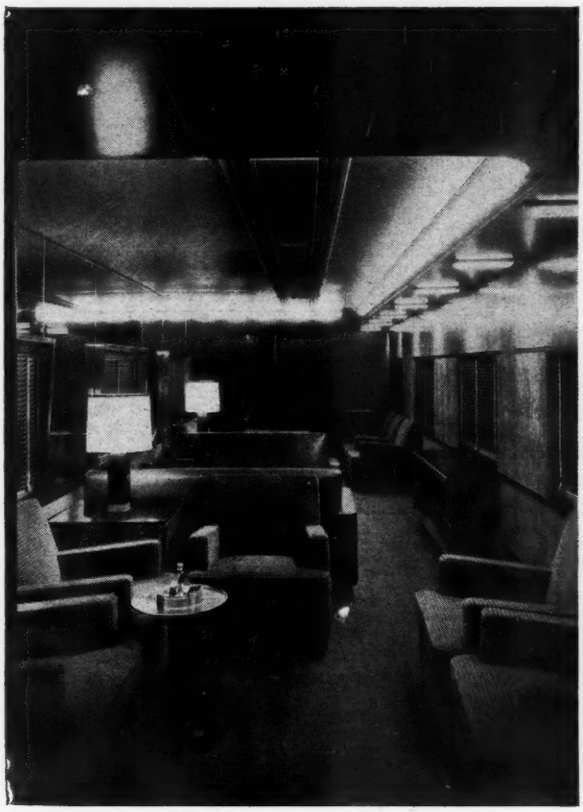
Behind the phone booth in the club car is a service bar for the lounge section which occupies the remainder of the car. Large sofas and lounge chairs, built-in settees, card tables and table lamps complete the appointments of the lounge.

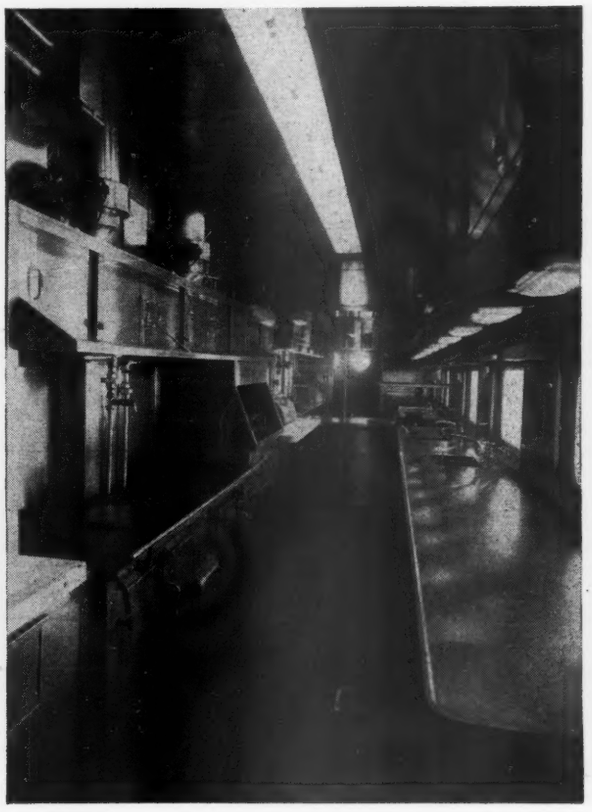
Lookout Lounge Car

The Lookout Lounge car features an observation end with floor raised 12 in. above the normal floor level, extra large windows for greater visibility, and comfortable chairs and sofas, seating 14 passengers. The section forward of the raised observation end, and separated from it by Tuf-flex glass partitions, is a lounge with a service bar. On a panel in this section is spotlighted an original contemporary oil painting, loaned by the Grand Central Galleries in New York, and changed periodically. The railroad has approximately 400 reproductions of masterpieces hanging in the cars of its various trains, but this is the first time it has displayed gallery paintings on any train. Forward of the lounge, with its comfortable chairs and

Secretary's room and telephone switchboard in the "Century" club car (left). Table and seating arrangement in the sectionalized full-length diner (right)

Seating and lighting arrangement in the new "Century" club car (left). Interior of the kitchen (right)





intimate cocktail groupings, are five double bedrooms.

One of the problems to overcome in decorating a train is to break up the long corridor effect of each car.

In the new "Century" cars, winged partitions, intimate groupings of furniture, the generous use of mirrors, colors and fabrics are all combined to break up the corridor effect, and create an air of the luxurious private club, largely free from enforced association with fellow travelers.

To "tie" the train together as a unit, uniform color schemes, upholstering, paneling and general treatment are used. The new "Century" exterior is painted in the traditional shades of "Century" gray, with aluminum striping, a light gray panel being used between windows, and darker gray above and below.

Interior Decorative Features

In the observation end with raised floor level and extra high windows, a light-green ceiling increases the effect of spaciousness. At the very end, facing the rear, is a sofa for two, upholstered in bright red leather. Forward of this sofa are four gun-metal-leather-covered chairs, then two sofas upholstered in a soft gray-beige fabric, each seating three passengers, with a low coffee table between them. The table has a black Formica top. Two steps leading to the lower level are flanked by solid metal hand rails, designed as part of the Tuf-flex glass partitions separating the two areas. Framed by the railings are two built-in bright red leather seats. Lighting in the observation end consists of multiple units located in the Lundy ceiling air diffuser panel.

The forward lounge section of this car has a large three-seat sofa, a card table with four chairs, and a cocktail table for two. The sofa is upholstered in soft gray-beige, the card chairs in bright red leather, and the cocktail chairs in gun-metal leather. The chairs and Flexwood on the window zone and pier panels are bleached walnut. The floor is covered with a soft brown loop carpet. Table tops are black Formica and window sills, gray Formica.

In the partition at the forward end of the lounge, which separates it from the five double-bedrooms, light-green leather is recessed in the wood veneer to form a background for the spotlighted framed original oil painting which is displayed. A snack bar is also part of the appointments of the lounge.

The center section of the club car features two six-foot red leather sofas facing each other, with a low black Formica-topped coffee table in between. Directly opposite the sofas is a large bleached-walnut magazine cabinet with black Formica top. Twelve extra lounge chairs, covered in soft gray-beige fabric, and two bleached walnut tables with lamps, comprise the rest of the furnishings of the center system of the lounge.

Framing the mirrors of the center section are two large gun-metal-leather wing partitions, adjacent to which are built-in blue-green upholstered seats with black Formica-top cocktail tables. Two black Formica-top card tables, each with four bright red-colored leather chairs, complete the appointments of the lounge. The floor is covered with a soft brown loop carpet.

In the dining car, lighting is direct-indirect, patterned to repeat in the mirrors. Bright red leather wing partitions, tooled with silver lines, separate the center section from the adjacent intermediate sections. These sections each contain four tables. The chairs are covered in blue-green leather. Walls and ceiling are light gray-brown.

A Tuf-flex glass partition forms an intimate end section with tables for four on either side. Walls and ceiling, a slightly darker gray-brown than the adjacent areas, are offset by the leather upholstering which matches the red of the leather fins in the center section. At the opposite end of the car, the end section has two built-in settees upholstered in red leather. Pier panels in the end and intermediate sections are covered with gray and silver drapes. The carpet is brown loop.

The all-room sleeping cars appear in two major color schemes. In one, the mohair upholstery and carpet is rust; in the other, the color is green. In each car the color scheme in all rooms is uniform.

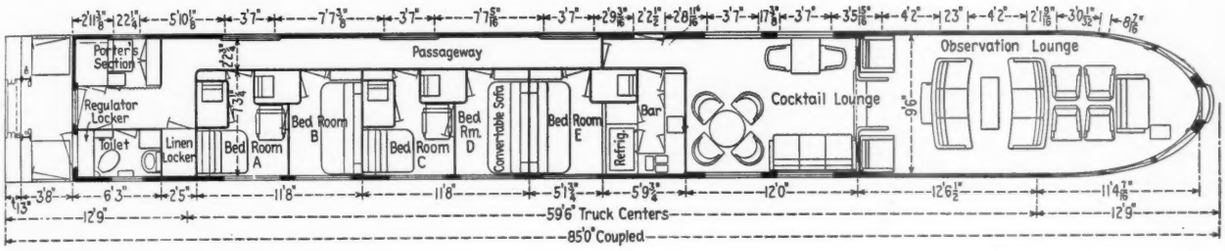
One of the control panels and hand sets for the intercommunicating telephone

Radio and Telephone Communication

The intercommunicating telephone and public address system each employs four-wire circuits running the full length of the train. Except the dining cars, each car equipped has a control panel and hand set located behind a flush steel cabinet in the passageway at the end of the car. Each dining car is equipped with a portable phone which plugs into a flush panel at the steward's work section. The hand sets are sound-powered and serve also as microphones for the public address system. All cars, except sleepers, are fitted with loud speakers.

Operation of the dial at the calling station moves all stepping switches to the desired number. Pressing the buzzer push key operates all buzzer relays, local buzzers, and a light signal on the car dialed. When the system is in operation, a light indicates whether telephone or public address circuit is in use.

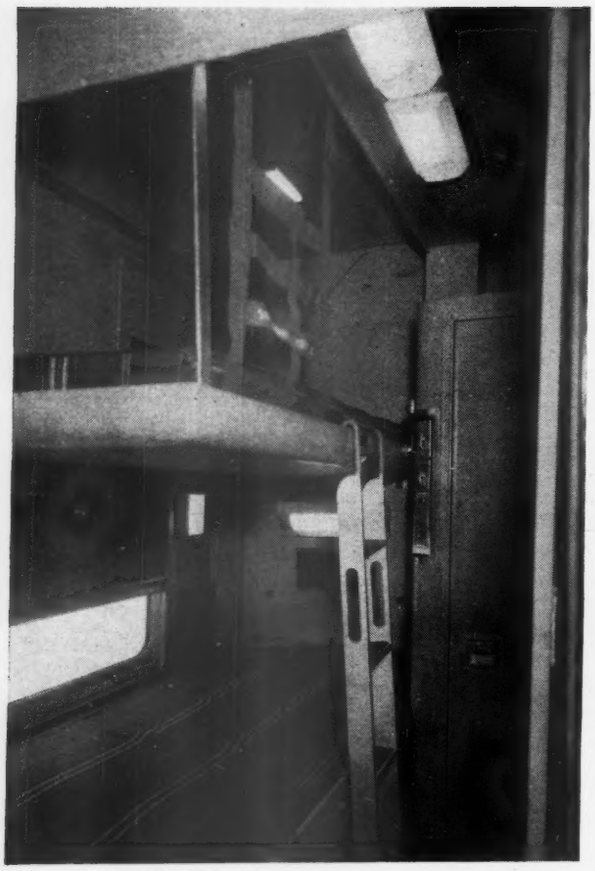
The telephone and address system combine to pro-

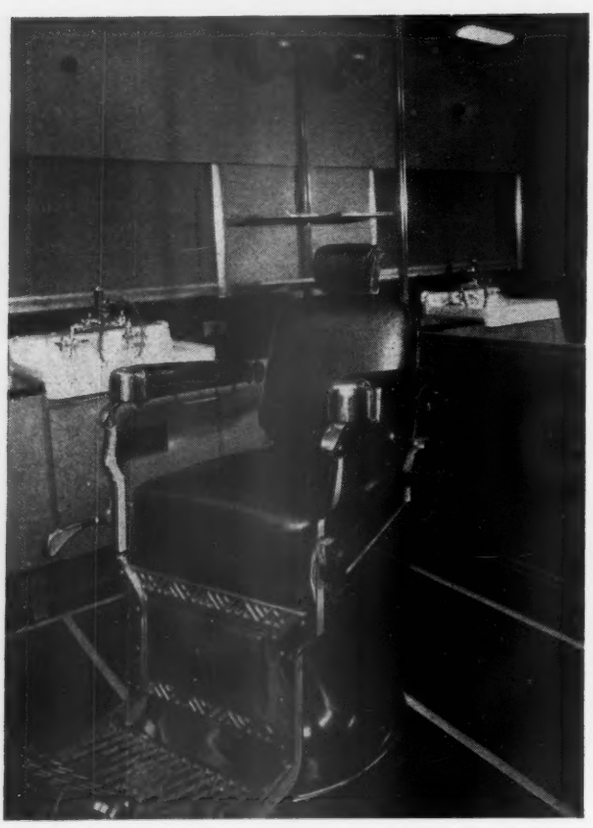


Floor plan of the Lookout Lounge car

Partial List of Materials and Equipment on the New N.Y.C. "Twentieth Century Limited" Trains

Trucks	General Steel Castings Corp., Granite City, Ill.
Truck springs	Crucible Steel Company of America, New York
Truck locking center pins; side bearings	W. H. Miner, Inc., Chicago
Roller bearings with hot-box alarms	Hyatt Bearings Div., General Motors Corp., Harrison, N. J. Timken Roller Bearing Co., Canton, Ohio
Wheels	Armco Steel Corp., Middletown, Ohio Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Axles	Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Shock absorbers	Houde Engineering Div. of Houdaille-Hershey Corp., Buffalo, N. Y.
Draft gear	Waugh Equipment Co., New York
Couplers and unlocking mechanism; coupler yokes	National Malleable & Steel Castings Co., Cleveland, Ohio
Center-plate, body side-bearing, equalizer coil spring, and journal-box pads	Fabreeka Products Co., Boston, Mass.
Air brakes	New York Air Brake Co., New York
Clasp brakes	American Steel Foundries, Chicago
Brake shoes	American Brake Shoe Co., New York
Hand brakes	National Brake Co., New York
Steel plates and sheets	Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Platform floor covering	Alan Wood Steel Co., Conshohocken, Pa.
Flooring, composition:	
In kitchens	Crossfield Products Corp., Brooklyn, N. Y.
Except in kitchens	Tuco Products Corp., New York
Window sash	Adams & Westlake Co., Elkhart, Ind. (lounge sleepers) O. M. Edwards Co., Syracuse, N. Y. (room sleepers) Libby-Owens-Ford Glass Co., Toledo, Ohio
Glass	Pittsburgh Plate Glass Co., Pittsburgh, Pa. Libby-Owens-Ford Co., Toledo, Ohio
Vestibule curtains	Morton Mfg. Co., Chicago
Window-sill capping	Formica Insulating Co., Cincinnati, Ohio
Insulmat	J. W. Mortell Co., Kankakee, Ill.
Insulation	Gustin-Bacon Mfg. Co., Kansas City, Mo.
Motor generator for lighting and electric motors	General Electric Co., Schenectady, N. Y.
Motor generator drive	Spicer Mfg. Corp., Toledo, Ohio
Voltage regulators	Safety Car Heating & Lighting Co., New York
Storage batteries	Gould Storage Battery Corp., Depew, N. Y. K. W. Battery Co., Chicago
Train-line jumpers for batteries; charging receptacles	Pyle-National Co., Chicago
Train-line jumpers for radio and telephone inter-car connections	Mines Equipment Co., St. Louis, Mo.
Inverters for electric razors	Cornell-Dubilier Electric Corp., South Plainfield, N. J.
Steam heat and controls	Vapor Heating Corp., Chicago
Flexible metallic heat connectors	Barco Manufacturing Co., Chicago Vapor Heating Corp., Chicago
Heat specialties	Vapor Heating Corp., Chicago
Steam-pipe covering and fittings	Johns-Manville Corp., New York
Air conditioning; mechanical refrigeration kitchens, diners and bars	Frigidaire Div., General Motors Corp., Dayton, Ohio
Air filters	Air Maze Corp., Cleveland, Ohio
Recirculated air grilles	Barber-Colman Co., Rockford, Ill.
Air diffusers	
(rooms)	Anemostat Corp. of America, New York
(open cars)	E. A. Lundy Co., New York
Exhaust fans for discharging air from refrigerator units	L. J. Wing Mfg. Co., New York
Exhaust and blower fans for kitchen and pantry	Westinghouse Electric Corp., Pittsburgh, Pa.
Kitchen, bar room, and pantry equipment	Angelo Colonna, Philadelphia, Pa.
Furniture in lounge	S. Karpen & Bros., Chicago
Dining-car chairs; folding chairs in sleeping rooms	General Fireproofing Co., Youngstown, Ohio
Upholstery	Goodall Fabrics, Inc., New York Massachusettes Mohair Plush Co., Boston, Mass. Shelton Looms, New York
Leather	Cleveland Tanning Co., Cleveland, Ohio Eagle-Ottawa Leather Co., Grand Haven, Mich.
Foamrubber mattresses	Hewitt Rubber Corp., Buffalo, N. Y. United States Rubber Co., New York
Carpet	Mohawk Carpet Mills, Inc., Amsterdam, N. Y.
Flexwood veneers (lounge cars)	United States Plywood Corp., New York
Partitions	Haskelite Mfg. Corp., Chicago
Window curtain fabric	Pantasote Co., New York
Venetian blinds, lounge car	Ajax-Consolidated Co., Chicago
Window curtain fixtures	Adams & Westlake Co., Elkhart, Ind.
Fluorescent lighting fixtures	Luminator, Inc., Chicago
Radio in lounge rooms	Dormitzer Corp., Boston, Mass.
Dictaphone	Dictaphone Sales Corp., New York
Hardware:	Adams & Westlake Co., Elkhart, Ind. Dayton Mfg. Co., Dayton, Ohio H. S. Getty & Co., Philadelphia, Pa. Yale & Towne Mfg. Co., Stamford, Conn.
End door opener and closer	National Pneumatic Co., Rahway, N. J.
Magic door controls for full-length diner	Stanley Works, New Britain, Conn.
Annunciators, call bell and chime (in sleepers)	Edwards & Co., Norwalk, Conn.
Sound-powered telephone receivers	United States Instrument Corp., Summit, N. J.
Inter-car telephone	McKee Electric Co., New York
Hoppers in general toilets	Dayton Mfg. Co., Dayton, Ohio
Toilet facilities, sleeping rooms, toilet seats	C. F. Church Mfg. Co., Holyoke, Mass.
Washstands in general toilets	Crane Co., Chicago
Paper holders	Geo. T. Johnson
Water coolers	E. A. Lundy Co., New York
Prism glass in toilets	Pressed Prism Plate Glass Co., Morgantown, W. Va.
Exhaust fans in toilets	Diehl Mfg. Co., Somerville, N. J. Safety Car Heating & Lighting Co., New York
Paint:	
Exterior	E. I. du Pont de Nemours & Co., Wilmington, Del.
Interior	Glidden Co., Cleveland, Ohio Pratt & Lambert, Inc., Buffalo, N. Y. Sherwin-Williams Co., Cleveland, Ohio
Electric marker lights	Lovell-Dressel Co., Arlington, N. J.
Fire extinguishers (kitchen)	Walter Kidde & Co., Belleville, N. J. American-La France-Foamite Corp., Elmira, N. Y.





Above — One of the bedrooms with longitudinal beds. Below — Barber shop equipment in the "Century" club car

vide a number of services, such as arranging for dining-car seating, paging recipients of telephone calls on the radio telephone in the club car, the making of announcements, etc. There is also a rear brakeman's telephone installed under the car at the observation end. There is a possibility of eventually extending the telephone service to the locomotive.

Air Conditioning and Heating

All passenger compartments are air conditioned, using the New York Central modulated system, furnished by Frigidaire on each car and an Anemostat air-distributing system in the sleeping-car rooms. The evaporator is in two sections to provide modulated cooling, without complete on-and-off cycling.

The cars are heated by the Vapor zone-control system with both overhead and floor heat. The central control of air conditioning and heat in each car is effected by a single switch; movement of the switch to one side of the position brings the heating system into operation and movement to the other side starts the air-conditioning system. The selection having been made, the operation is automatic, under thermostat control.

Each room has three temperature controls. All are effective when the car is being heated, and one of them also operates during cooling. An automatic floor-heat-control switch can be operated to control the room temperature between a minimum of 65 deg. F. and 80 deg. F. A manual remote control is also available to shut off the floor-heat steam completely if the occupant so desires. Its principal function is to serve as a protection in case of a failure of the automatic temperature control. A damper in the air duct can be operated by the occupant to control the amount of air admitted to the space. With the exception of the manual remote-control steam valve, these controls and the light and fan switches are all arranged in a single small panel.

Electric Power

Electric power is supplied by a G.E. 30-kw. axle-driven motor-generator set on the kitchen car, and 20-kw. motor generator on all other cars. The sets are operated by Spicer mechanical drive from a truck axle, or from three-phase, 220-volt a.c. standby power in yards and terminals. Twenty-five-horsepower motors are used with the 30-kw. generators and 15-hp. motors with the 20-kw. generators. There is a three-phase, 220-volt a.c. standby power receptacle on each side of each car.

Circulating Drinking Water

The drinking-water circulating system consists of a loop of ⅜-in. tubing from which ¼-in. tubing leads to the faucets in the rooms. To cool and circulate the water a heat exchanger, a motor-driven refrigerant compressor and condenser, and a water-circulating pump are resiliently mounted on a rigid frame installed in a locker inside the car. By breaking refrigerant, water and electrical connections outside the unit, it may be removed from the locker for repairs.

Light Weights of the Cars in the New "Twentieth Century Limited" Trains

Car type	Light weight, lb.
Railway post office	127,000
Kitchen-dormitory	137,200
Dining	119,525
Lounge-barber-secretary	124,250
22-roomette	141,100
10-roomette, 6-double-bedroom	138,800
12-double-bedroom	132,490
5-double-bedroom-lounge-observation	130,200

The Lundy heat exchanger consists of closely adjacent coils of small copper refrigerant and water tubes in a solid cast ring of aluminum. The size of the tubes and the surrounding aluminum insures the unit against damage from freezing and provides a highly efficient heat transfer.

The water pump develops sufficient pressure to overcome the friction of the circulating loop and keep the small volume of water in the loop circulating slowly. The temperature of the water is maintained automatically at 50 deg. by thermostatic control of the refrigerant system. When drinking water is drawn from a faucet, the pressure on the water-supply system forces water into the cool-water system through a check valve at the intake side of the heat exchanger.

Air for cooling the condenser is withdrawn from the corridor of the car through louvres in the locker door and exhausted into the general toilet.

With water at 90 deg. F. at the intake, the system has a capacity for cooling 5 gal. per hr. to 50 deg. F. at the faucets.

Mechanical Equipment

Except for the mail car, the trucks are four-wheel, with 36-in. rolled-steel wheels mounted on roller-bearing axles. The axle sizes are 6 in. by 11 in. on the kitchen-dormitory car and on all of the full room cars. On the dining car and the lounge-barber-secretary car the journals are 5½ in. by 10 in. The front truck of the bedroom-lounge-observation car has 6-in. by 11-in. axles and the rear truck 5½in. by 10-in. axles. The mail car has six-wheel trucks with 5½-in. by 10-in. axles. The journal boxes are equipped with hot-box alarms. The four-wheel trucks have single drop equalizers with General Steel Castings alloy-steel frames, on which the pedestals are cast integral. Both the equalizer and bolster springs are helical coils. Fabreeka sound-deadening materials are installed under the center plate, the body side bearings, at the ends of the equalizer coil springs, and over the journal boxes.

The cars are equipped with HSC electro-pneumatic brakes with decelostat anti-slip control. The trucks have clasp brakes with two truck-mounted cylinders.

The cars have tight-lock couplers and Waughmat draft gears.

Information regarding additional details of these new "Twentieth Century Limited" cars is given in the table of specialties and materials used.

NEW EQUIPMENT FOR HANDLING OFFICE RECORDS

A three-unit process for microfilming, developing and reading the filmed records, capable of use by nontechnical office personnel, is an addition of Diebold, Inc., Canton, Ohio, to office equipment designed to speed handling business records and to cut down the space required for storage.

The process includes a camera capable it is said, of photographing up to 3,000 records of various types and sizes per hour. Pre-focused lenses in slip-in turrets make possible reductions for either one row of images on 16mm film; or one or two rows of images on 35mm film. Duplicates can be made if desired.

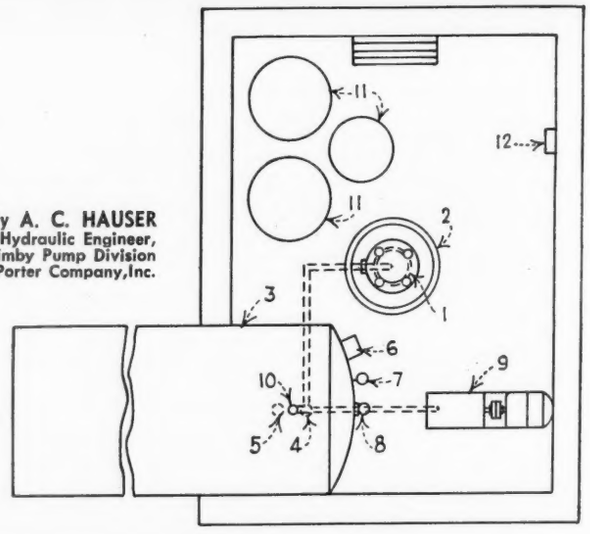
The exposed microfilm is developed in an automatic processor. The operator puts in ready-mixed chemicals, adds water, inserts film, closes the door and sets the timer. Reportedly the film is processed in less than an hour and the processor automatically shuts itself off.

Films are read in a motorized film reader, which is said to permit scanning at the rate of 100 ft. of film per minute. Film can be stopped, slowed or reversed at the touch of a button. A photo-print attachment on the reader makes any desired number of paper prints of any image.

Camera unit of the Diebold three-unit microfilming equipment

DIESEL WATER STATIONS IN "PACKAGED" UNITS

By A. C. HAUSER
Hydraulic Engineer,
Quimby Pump Division
H. K. Porter Company, Inc.



This drawing shows the principal elements of a "packaged" water station as suggested by Mr. Hauser. The numbered items are as follows: (1) Drilled well casing, (2) pump—turbine or jet type, (3) 2,500-gal. pneumatic water storage tank, (4) inlet pipe, (5) discharge line, (6) automatic control switch, (7) air volume control, (8) water gage, (9) air compressor, (10) air inlet, (11) water treating unit, (12) magnetic starter

For supplying make-up water for Diesel-electric locomotives in sparsely-inhabited territory where municipal water supplies are not adequate, there would seem to be substantial advantages in the use of "packaged" water-pumping stations. These advantages would accrue largely because of the relatively small investment in such stations and their low maintenance costs.

In arriving at the design described below for a packaged station it is assumed that the average Diesel locomotive requires a maximum of 2,600 gal. of water for cooling and heating purposes, that 15-car passenger trains are operated and that watering points are located about 200 mi. apart. On this basis it is estimated that the demand for water by individual locomotives will range between 1,000 gal. and 2,600 gal., depending somewhat on weather conditions and the elapsed traveling time between watering points. Another assumption is that the maximum requirement of 2,600 gal. must be taken on in a period of 5 min.

The accompanying sketch shows the principal features of a packaged water station designed to comply with the conditions outlined above. The design calls for a pit approximately 5 ft. or 6 ft. deep, having 9-in. concrete walls and overall dimensions of about 9 ft. by 12 ft. The pit should have a water-tight cover and a vented manhole and ladder for accessibility. It would house a drilled well consisting of a 6-in. or 8-in. casing carried to a suitable depth, which would depend on the level of the water-table in the vicinity. For pumping the water, a deep-well turbine-type pump or a deep-well jet-type pump would be mounted over the well casing. Both types of pumps would embody the centrifugal principle and would be constructed with bronze impellers and stainless steel shafting. They would also be directly connected to ball-bearing, moisture-proof motors. Since the capacity of a drilled well will vary somewhat, the size and capacity of the deep-well pump will be determined by the maximum capacity of the well under continuous pumping.

A surplus reservoir of water is necessary to meet the temporary peak demand. This would be obtained by the installation of a pneumatic pressure storage tank having a total capacity of 2,500 gal. and an actual water capacity of 1,600 gal. This tank would be buried underground horizontally at the floor level of the pump pit, in such a manner that one end would extend approximately 3 ft. inside the pump pit. Mounted on the convex head of the tank would be a water gage, an automatic air volume control, a pressure gage, and an automatic electric motor control switch. On the top side of the exposed part of the tank shell would be mounted the air inlet fittings and check valve.

The automatic electric control switch would be set to operate on a variation of 10 lb. in the tank pressure so that a certain amount of water would have to be displaced from the tank before causing the pump to start operation to meet the peak demand momentarily for water. As a consequence both the pressure in the tank reservoir and the pump output would be contributing to the water flow at the same time.

To maintain the proper air level in the pressure tank, a 1/4-hp. motor-driven air-cooled compressor would be operating in conjunction with the water pump, thereby eliminating the possibility of the pneumatic pressure tank becoming water logged. The automatic air-volume control would release any excess air in the tank should the output from the compressor get ahead of the air requirements.

Where water treatment is desired, a water-treating unit could be added to the installation. The outside connection to the water line would be provided by a suitable hydrant installed at ground level.

If a low-output well should be encountered, two 2,500-gal. tanks would be used to give a greater reservoir capacity. These tanks would be connected in parallel so that the proper water and air levels would be maintained in each of them. They would have a combined reservoir capacity of 3,200 gal. The controls and auxiliaries would be the same as described above.

This type of pump installation is practically foolproof and is available as a complete installation from many leading pump manufacturers. In addition to a low first cost for equipment it requires little care other than a general inspection of controls every 60 to 90 days and a general overhaul inspection once a year. The average cost of such an installation, including a drilled well 100 ft. deep, would average about $5,000, including installation.

The same installation could be made to serve also as a refueling unit by the addition of an oil storage tank, buried opposite the water supply tank, and by installing in the pump pit a motor-driven, direct-connected rotary pump of the external gear and bearing design.

Past experiences with water-pumping installations of the type described show a tank life of about 20 years, and 15 years or better for the pumping units. Freezing is not encountered if a tight pit cover is used.

HOW TO MAKE HIGHER RATES PALATABLE

If improved earnings are linked to specific expenditures for reducing costs and improving service, shippers will see their advantage in going along with higher charges

By W. B. SAUNDERS
Transportation Consultant

In recent proceedings before the Interstate Commerce Commission — proceedings in which I have observed some unusual bitterness and strong feeling on the part of the various parties to the case — the position of the railroad industry has been that it is not making enough money, that it ought to make more money, and that it needs this "more" because it is entitled to a "fair" return. The fair return is defined as being six per cent of the net investment, including property, cash and materials and supplies. Here, it seems to me is the critical weakness of the railroad position. There is nothing sacred or even appealing about the flat, firm position that a six per cent return on a certain basis is essential or is even required by law or by any other standard. This is really an arbitrary figure. The railroads do not need per cent, they need dollars.

The problem is to get more dollars. There are a number of ways to do this which are attempted by rail executives. One is to seek legislation necessary to achieve competitive equality — a very long-run approach to the dollar-scarcity problem. Other phases of the legislative approach likewise have long-range potential. The short-run answer is to increase rates. True, rate increases meet the problem of right now. But management sees that this is no final answer. Rates cannot be raised indefinitely without driving more and more traffic into the waiting arms of competition.

Cost Reduction

If a satisfactory net income cannot be achieved by mere rate increases over the long run (and this seems fairly clear) then attention must also be directed with at least equal vigor to the problem of cost reduction. It does not matter much to the investor whether the net income is improved by lowering costs or by increasing rates. Put it a little more strongly: it may be said that the investor would prefer to have net income at a high level without increases in rates because this is clearly to the long-run interest of the railroad industry.

On the other hand, these two steps — (1) increasing rates, and (2) decreasing costs — go hand in hand a good part of the way. One of the ways to save money is to spend money, and this applies with particular force in the case of the railroad industry.

Practically every executive feels that costs should and can be cut. And if he has his way, they will be. But it is not enough to say simply, "We will cut costs." There are different ways of looking at costs, different ways of measuring costs, and different conclusions about costs.

The easiest way to look at costs is in terms of expenditures. With this viewpoint, management asks in effect: "How much was spent last year for this item? How much the year before?" And then it often follows through with an order to cut to some previous year's levels of expenditures. It may start with maintenance of way and then go on through mechanical, accounting, traffic and the rest. Also, under the same conditions, management can simply cancel orders. Especially after an upswing this has big possibilities. Expenditures can be sharply curtailed by holding off on buying new locomotives, new cars, new rail, new tools, and so on. It is worth noting here that railway purchases of new equipment, materials, supplies and fuel amounted to nearly two billion dollars in 1947. That's bigger than it has been for a long, long time. A cut of 10 per cent would mean a lot of money saved. But all of this means looking at costs in terms of expenditures alone.

Some executives look at it another way. There is obviously more to it than the straight expenditure angle. Perhaps it is possible to spend money in order to save money. This very frequently turns out to be practical common sense rather than any theoretical paradox. The key is that costs are relative. Management must compare the cost of doing a job one way with the cost of doing it another way. Only after this comparison does the executive decide whether to save by spending or by not spending.

The problem as of today is that to save the money by spending money requires first that there be money to spend. This is so simple and so elementary that it can be easily overlooked by the practical and the theoretical expert in the field of transportation. Railroad management must come to the public and to the shipper and to the Interstate Commerce Commission requesting increases in rates not just because the railroads want more money, but because the money is needed in order to be spent so as to save money — for shippers no less than for the railroads — in the future.

Attracting Investors

Clearly the railroad industry — like other industries — needs to have a return which investors will consider reasonable. It is customary to think in terms of a need for an average net railway operating income of about one billion dollars per year. What is not considered, however, is the meaning or significance of such a level of income. Ordinarily, we say that industry ought to have a fair return so that it can maintain its credit and attract capital. One of the reasons for having any net income at all is to permit the payment of dividends and thus to maintain the position, credit-wise or capital-wise, of the industry. But if this were the only reason for a net income, then one billion dollars is more than is needed. The most important reason — and this reason is usually implied rather than stated specifically — is

to enable the industry to grow, to expand, and to improve its service and facilities. The purpose of improvements ultimately is to permit the lowering of costs and the betterment of service. And the purpose of all this is to retain and to recover traffic.

In other words, the railroad industry needs a net income because it wants to spend the money and not to save it — apart from necessary payments of dividends to investors. Broadly speaking, there are really only two purposes for capital expenditures. One is to permit the lowering of costs and thus to assure future earnings. The other is to improve the service (and this may mean an increase in costs), and thereby to improve revenue by adding traffic. A given expenditure may be looked at from either standpoint. Either standpoint is of great importance to the railroad industry, and, for that matter, to any other industry. To generalize, it may be said that if this were not the purpose of expenditure, then there would be little justification for the outlay of capital funds.

It seems clear to me that neither the shippers nor the Interstate Commerce Commission, nor, indeed, the railroad industry itself, is enthusiastic about increasing rates. It also seems probable that we have not seen the end of rate increases in the railroad industry. This is likely if only because of the long-run trend toward declining traffic. To go one step further, if the end of the railroad freight increases is in sight, the prospect for a reduction of rates is extremely remote. To achieve support of its program and to improve its public relations, the railroad industry should adopt a more attractive — and also more factual — approach to its revenue needs.

Capital Expenditures

The time has come to take an inventory. The railroad industry can readily point out what desirable capital expenditures on various items should be over the next five years. It can determine the total amount of capital required and, more important, determine the effect of projected expenditures on costs.

Most individual railroads have a pretty clear-cut idea of what projects they would like to undertake. They have a pretty good idea of how much money it will cost to carry them to completion and they have a pretty good idea as to how much money they will save by making the improvement or by making the expenditure. Similarly, they have a pretty good idea of what the revenue effects will be of expenditures intended to improve the service, to provide new services, or in other ways to attract or recover traffic.

All it takes is a coordinating hand which can bring together all of the judgments, opinions, statistics and experience of the individual railroads to arrive at a composite picture for the industry. It seems entirely practical to have a study made which would show the effect of planned expenditures on future operating costs, making certain assumptions as to wage levels and concentrating wholly on the problem of other elements affecting costs.

The railroad industry has now had sufficient experience with the Diesel engine so that it is entirely practical to arrive at some dollars and cents conclusions about the effect of the Diesel on operating costs as compared with steam. It is true that the savings resulting from Diesel operation vary from area to area, depending on the characteristics of the line, its operation and its traffic. Nevertheless, it is possible to arrive at an average conclusion as to the effect of the Diesel, and to relate the dollars invested with the actual operating cost, including depreciation, over the years during which the Diesel will be used. These figures can then be compared with the known experience of the carriers with steam locomotives.

The same point can be made with respect to the use of centralized traffic control. Again, the results will vary from carrier to carrier, but enough experience is available so that it is possible to generalize about the effect on the industry as a whole.

To a lesser extent, but nevertheless on a practical level, it is possible to determine the effect of changes in grades and curvature on operating costs, and, to a certain extent, on service and therefore on traffic and additional revenue. It is not necessary at this time to go into the mechanics of actually conducting such a study. Suffice it to say that there are data and that these data can be applied in a wholly practical way to arrive at a wholly sound and reasonable conclusion.

New Techniques

Some of the devices or techniques or operating methods which may be considered desirable will lower costs. Others will be of primary importance insofar as they add revenue by adding traffic. Sometimes it is possible to add costs to one department and cut costs in another.

A new device comes out which will save fuel. The fuel expert favors it because it will cut the fuel budget and the fuel budget is the primary factor which management uses to decide whether the fuel expert is doing a good job. But along comes the maintenance expert. He turns his thumbs down on the proposal because it will raise maintenance expenses and the maintenance budget is the primary factor which management uses to decide whether the maintenance expert is doing a good job. Obviously, the decision on whether to install the new device depends on the facts management has on hand as to the effect of the device on net costs to the railroad as a whole. It is important, therefore, in making these analyses to take the position of top management in the organization rather than to be guided solely by the particular needs of particular departments. Otherwise, the results would be misleading and unsound, both for the individual railroad and for the industry as a whole.

The same point should be observed in the matter of weighing the public relations value of an expenditure. Sometimes it may involve labor relations or shipper relations. But no matter what the particular item, the point is that management can weigh alternative policies in terms of actual or carefully estimated dollars and cents.

There is another aspect to this two-way street. It is not to be inferred that the purpose of this is solely to encourage railroad spending on new technological developments. The reverse may be equally true. Every railroad executive is subject to great pressure from suppliers. The manufacturer who spends thousands of dollars on the development of a new idea naturally seeks to expand his sales so as to amortize his invest-

ment in pioneering. This is inherent in industrial progress.

Often the results are unquestionably beneficial to the railroad industry but sometimes the railroad buys too much too fast. It may hope to save by spending, but it may be seriously in error because it overestimates its future needs or underestimates its existing capacity. Perhaps it would be more economical to wait five years rather than to buy now. This type of situation should be considered carefully in the preparation of an overall picture for the railroad industry.

In short, the problem comes down to this. The railroad industry has to ask itself: "How can I get the greatest return on my investment?" If it answers the question for the industry as a whole and also indicates in dollars and cents what the meaning of the investment and the savings resulting from the investment are, it is entirely likely that the relationship between railroads, shippers and the Interstate Commerce Commission will be materially improved. There should be much less objection to a program which (1) raises rates now with the express purpose of (2) attempting to lower rates in the future by (3) lowering costs through sound investment.

PACKAGING ENGINEERS MEET AT CHICAGO

Four-day meeting stresses better packages, speedier and safer materials handling, good loading; Green says packaging engineers help in claims reduction

A. L. Green

The reduction of 14 per cent in the number of claims filed against the members of the Freight Claim division of the Association of American Railroads in the first six months of this year was due in large part to the activities of the industrial packaging engineer, A. L. Green, special representative, A.A.R., told the third annual meeting of the Industrial Packaging Engineers' Association, which was held at Chicago, October 4-7.

Prior to Mr. Green's statement, W. H. Roehrig, supervisor merchandise and demurrage, Atchison, Topeka & Santa Fe, had told members of the same organization that improved mechanical handling, and bulkheading in cars, had been outstanding factors in making it possible for the Santa Fe to reduce its claims on l.c.l. alone, during the first six months of 1948, by almost $200,000 from the 1947 claim bill. Thus, the application of three subjects which this meeting was to discuss, i.e., materials handling, loading and packaging, were credited by these railroad men with the not inconsiderable decrease in number of claims mentioned by Mr. Green.

C. E. Swanson

W. H. Roehrig

Mr. Green further told the members of the Association that the best antidote for loss and damage was the package engineer. "Not long ago," he said, "scientific package designing was in the hands of a few trained men who could qualify as experts. Today there is scarcely a big industry that does not employ a graduate engineer in charge of packaging. As it should be, this man also has charge of carloading methods, for obviously the two go hand in hand. . . ." Mr. Green urged upon all present the financial and educational advantages of membership in the I.P.E.A. (This organization will be known as the Society of Industrial Packaging and Material Handling Engineers, from now on.) "I am confident," he concluded, "that it will pay industry handsomely to be represented in this association and take in the benefits of its re-

search and development work in the fields of packaging of manufactured goods and materials handling."

R. C. Sell, traffic manager, Koehring Company, Milwaukee, Wis., stated that transportation, materials handling and packaging all were important in any consideration of the causes for loss and damage. Neither shipper nor carrier is entirely responsible for the great yearly loss and damage bill, was his assertion. Shippers often don't mark packages properly, nor do they always package the shipments adequately, he continued. But, on the other hand, "freight house forces and P&D drivers must be educated to refuse improperly marked and packaged shipments, and then tell the shipper why they were refused." If this were done, he concluded, shippers "would readily fall in line and correct the infraction."

As mentioned above, W. H. Roehrig of the Santa Fe told those in attendance that mechanical handling of freight was helping cut loss and damage, but while aiding the railroads in this manner it was also an important factor in cutting handling costs and speeding the delivery of freight, he continued. But both Mr. Roehrig and C. E. Swanson, assistant general storekeeper, Chicago, Burlington & Quincy, told their audiences that those who adequately studied their needs before mechanizing were the ones who first got these dividends.

Mr. Swanson particularly urged upon his listeners the study of changes necessary in fixed physical plant before buying a lot of equipment, for, as he said, "anyone who thinks that a lift truck and a few pallets is the answer to all his material handling worries will be deeply disappointed if he has failed to analyze thoroughly the requirements of his entire operation." Mr. Roehrig was backing Mr. Swanson when he said that the Santa Fe had approached freight house mechanization with caution, first making some improvements in the freight houses to be mechanized and in a few cases, as at Los Angeles, Cal., building completely new facilities.

When the Santa Fe began to install mechanical handling equipment in freight houses, early in 1946, Mr. Roehrig continued, Kansas City, Mo., was one of the first stations to "get the works." The first such equipment consisted of burden carrying platform trucks and fork-type lift trucks. Almost at the outset congestion disappeared from the freight house. Then more such equipment was added. The cost of the machinery was more than saved in the first year of operation. From 30 to 35 per cent more tonnage is handled daily than was possible during the hand-trucking era, while the handling cost per ton has been reduced substantially.*

Mr. Roehrig then went on to cite figures in support of mechanical handling over hand-trucking. In all cases the fork truck out-performed both the hand truck and the platform truck, being between 40 and 300 per cent better than the latter and from 6 to 40 per cent ahead of the platform truck. He laid this superiority of the fork truck to the fact that its operator seldom had to dismount to load freight as was the case with platform truck operators.

Mr. Swanson told his hearers that the railroads wanted to get their supplies shipped to them in unit loads, wherever this was physically possible. However, he said, the railroads first must agree among themselves as to how they want to receive their supplies and then try to convince their suppliers, through joint action, that unit load shipping will save both parties money. (See *Railway Age* for October 9, page 67.) He cautioned against thinking of the unit load only in terms of the pallet, saying that many materials could be made into unit loads without pallets. Study of these possibilities was advocated until the factor of the added weight of the pallet in computing freight charges is worked out.

On the fourth day of the meeting, a loss and damage session was held, presided over by R. J. Bayer, editor of Traffic World, and featuring the A.A.R.'s movie, "Easy Does It." Two dramatic skits having to do with the loss and damage problem, written by Mr. Bayer, were presented and won much favor, as did the brief remarks of Irving M. Peters, traffic manager, Corn Products Refining Company, Chicago.

On display at the exhibition were many products designed to make packaging and material handling bring about cost and claim reduction. Many of the items displayed were of particular interest to the railroad claim prevention and station force personnel present. Efficient packages, better package sealers and other tools of the railroad container engineer's trade were shown.

*The text of Mr. Roehrig's speech will appear in a subsequent issue of *Railway Age*.

New Book . . .

MANUAL OF REPORT PREPARATION, by Frank Kerekes and Robley Winfrey, 397 pages. Published by Wm. C. Brown Company, Dubuque, Ia. Price, $6.

With the expansion of the activities of business, industry and government there has come the need for greater use of accurate, reliable and concise methods of communication of ideas between contemporaries, as well as recording ideas for those of tomorrow. Reports—technical documents within any field of endeavor—have become the standard media through which staffs of business, industry and government communicate with those in or outside of their organizations. While there is no uniform standard for reports, the authors feel there is opportunity for improvement in composition and organization of many of the reports being currently prepared in business. It is in the interest of offering material and suggestions for the improvement of report preparation that this manual is written. Stress is placed on the preparation of the typescript, handmade reports and the original form of all reports whether or not they are later published or duplicated by other means. Much of the usual academic treatment of English and composition is omitted. While the authors wish to stress the importance of clear, concise and effective expression, they have approached the preparation of reports on the basis that the skill of writing is a basic tool already acquired by one who has reached the level of report writing. Report preparation is a specialized application of communication which uses, in addition to English, techniques of collection, assimilation and analysis of the pertinent information, exercise of critical judgment, and expression in oral, graphic and mathematical systems. Therefore, the emphasis is upon the complete process, "preparation" rather than only on "writing" of reports.

The aquarium on the tavern lounge car. Leather-covered seats against the wall of the aquamarine and lemon salon are equipped with specially designed tables to allow plenty of space for passengers to move about or look at the goldfish

Coach travelers in the Chesapeake & Ohio's new cars, built by the Budd Company, may place their luggage in lockers at car entrance and retain the key which is automatically released when luggage is placed in the locker. There is no charge for the service

C. & O. DISPLAYS NEW STAINLESS STEEL CARS

Left—A hostess on the family coach helping a traveling mother by preparing a bottle of formula in the nursery. This car also provides a fully-equipped nursery with a diaper changing room. Right—The Plexi-glass enclosed play pen in the family coach. In the play pen children may sit on hassocks decorated with Mickey Mouse characters, play blocks or look at color books

SHIPPERS SEEK RETURN TO PREWAR STANDARDS

National association of advisory boards praises job railroads have done, but urges termination of wartime orders, construction of more cars, and better l.c.l. service

Warner B. Shepherd, assistant general traffic manager of the Aluminum Company of America, Pittsburgh, Pa., newly elected president of the National Association of Shippers Advisory Boards

Repeal of minimum load restrictions, more gondola cars, and better merchandise service were the most important desires of shippers expressed at the 12th annual meeting of the National Association of Shippers Advisory Boards, held at the Jefferson hotel, St. Louis, Mo., on October 5. William T. Faricy, president of the Association of American Railroads, and Colonel J. Monroe Johnson, director of the Office of Defense Transportation, were the principal speakers at a luncheon sponsored jointly by the national association and the Traffic Club of St. Louis.

The association's president, Carl Giessow, director of the Transportation bureau, St. Louis Chamber of Commerce, stated that, although the railroads recently have established records in operating efficiency, compared with their earlier performance, substantial increases in their rates and charges entitle shippers to improved transportation service. Too many cars, particularly in merchandise service, are not handled on schedule, Mr. Giessow declared. He described the gain in the total number of serviceable freight cars as "unimpressive," and the continued shortage of equipment as "the only justification for continuation of O.D.T. Orders 1 and 18A [minimum loading rules] which have become very irksome to shippers." The heavy loading requirements increase loading costs, he continued, and contribute substantially to loss and damage.

Mr. Faricy's luncheon address was a tribute to Warren C. Kendall, retired chairman of the Car Service division of the A. A. R., who was present with his wife. Posing the question, "Will true statesmanship have first place in this field of public endeavor, where law and regulation are designed to promote and protect the public interest and preserve the precious right of private enterprise?" Mr. Faricy declared, "Answers will be found that will keep the railroads in private enterprise and carry them to new heights of accomplishment so long as the industry is staffed by men of the courage, the integrity, the wisdom and the patriotism of Warren C. Kendall."

Colonel Johnson urged that the construction of freight cars be accelerated. "We need 600,000 new freight cars right now," he stated, "300,000 to replace cars that ought to be junked, and 300,000 additional new cars. The nation's population has increased 20 million during the same time that its freight car population has decreased 50,000." He criticised the method of basing steel allotments on "historical periods," since the railroads, over the years, have purchased irregularly in "fits and starts," and because tonnages used in earlier periods do not permit construction of a like number of cars or miles of rail of today's weights and standards. Should there be war, Colonel Johnson warned, the first line of defense will be transportation, and it is the duty of transportation men to be ready. The O.D.T. director praised the "patriotism and bravery" of the railroad men and shippers who brilliantly won the battle of transportation in World War II with 600,000 less freight cars and half a million less railroad employees than in World War I.

Colonel Johnson urged that the shippers and carriers strive for continuation of the effectiveness of O.D.T. Orders 1 and 18A after termination of the Office of Defense Transportation next February 28, stating that these orders have the effect of making available 300,000 additional freight cars annually.

More Facts on Freight Cars

Frank J. Rebhan, vice-president of the association, and traffic manager of the American Crystal Sugar Company, Denver, Colo., reported: "For the 12 months August, 1947, to July, 1948, inclusive, the total number of new cars installed was 96,030. In contrast, we find that during the same period a total of 81,665 cars was retired, leaving an increase in ownership of 14,365 cars. Reported under the heading 'awaiting repairs' on August 1, 1948, were 91,668 cars, an increase of 5,944 cars for 12 months. This produced a net increase of serviceable ownership cars for the 12 months of only 8,421." On the brighter side, Mr. Rebhan said, 10,191 new cars were installed in August, 1948, compared with 8,054 retired.

Mr. Rebhan praised the shippers boards' car efficiency committees for their accomplishments in getting the most transportation service out of existing equipment. He briefed reports of the 13 district boards, from which it became evident that strikes are still an important factor in the detention of freight cars; that the 5-day work week has had an increasing ill effect on car turn-around time, and that the complete shut-

down of some industries to allow vacations for entire forces—without arranging to stop the inbound flow of material—is a growing factor in car detention.

Arthur H. Gass, chairman of the Car Service division of the A. A. R., noted that in the fourth week of September when transportation demands are at their peak—average daily car shortages were but 19,583, compared with 37,414 for the corresponding week of 1947. He acknowledged the serious situation with regard to open-top equipment, and advised that within the past 10 days the A. A. R. had issued a letter to all roads with insufficient gondola ownership urging additional acquisitions. Some relief was indicated by his statement that gondola and hopper car shortages, which averaged 42,000 six weeks ago, were down to 17,000 in the latest week, due principally to the reduction in the export of coal. Referring to the advisory board car efficiency committees, Mr. Gass said, "I believe these local committees can probably do more toward assuring an adquate supply of cars and transportation than anything within the power of the railroads either in connection with the movement of cars, the acquisition of new cars or the reduction of cars awaiting repairs, because the benefits of their work are immediate."

Congress Wants Shippers' Views

J. Carter Fort, vice-president and general counsel of the A.A.R., summarized the status of pending legislation bearing on the railroad industry. Mr. Fort stated that Congress was disposed to enact legislation which tends towards a good transportation policy, and wants particularly the views of the shippers—the users of transportation. Illustrating, he pointed out that Congress had passed the Bulwinkle bill even over presidential veto, largely because it was made cognizant of the fact that the vast majority of shippers and rail men were in favor of it. Mr. Fort expressed disappointment over failure to repeal the transportation tax, but stated that the subject is likely to come before Congress again in 1949. He maintained that "excise taxes on transportation have no proper place in a peacetime tax system," pointing out that it is discriminatory in favor of private carriage against common carriage. He pointed out also that one of the dominating reasons for the tax on passenger transportation was to discourage travel during the war, a barrier hardly needed now.

Number of Claims Down

Under investigation by a Senate subcommittee is the effect of the recent basing point decision on the national economy. The St. Lawrence Seaway project has been recommitted to the Foreign Relations committee for further study. The Jennings bill which would limit the venue of personal injury claims, thus checking a fast growing "racket," passed in the House last year but failed to reach the Senate. This bill is due for reappearance in the next session. Action on this pending legislation favorable to railroads and shipping interests will be greatly enhanced by the voice of the shippers, Mr. Fort said.

Irving M. Peters, general chairman of the National Management committee of the 1948 Perfect Shipping Campaign and traffic manager of the Corn Products Refining Company, declared that extraordinary efforts on the part of railroads and shippers to reduce freight loss and damage have become so effective that substantial progress is evident. For the first seven months of 1948, the number of claims filed was down 14 per cent, compared with the corresponding period of 1947. The number of claims filed for July, 1948, was 373,726, compared with 464,368 in January of this year. "Despite the substantial reduction in the number of incidents resulting in claims," Mr. Peters said, "there was an increase of 11 per cent in the total amount paid by the railroads for loss and damage, which was approximately $75,960,697 for the first seven months of 1948, compared with $68,348,390 for the same period in 1947." He explained the increase was caused, in part, by the rising prices on freight for which claims are paid, by catching up the backlog of unadjusted claims on hand, and by the transfer to the final account of about $4,500,000 which was carried "in suspense" at the beginning of the year.

Mr. Peters outlined the research work being undertaken by railroads, the A. A. R., and manufacturers in the effort to cut damage, mentioning specifically the freight car truck and snubber road tests which are in progress, and the studies on transportation of perishables by the Refrigerator Car Research bureau of the A.A.R. Commercial box-testing laboratories "have demonstrated the practicability and accuracy of their methods and conclusions," said Mr. Peters in advocating greater consideration of the value of these services to shippers. He sharply criticised the "large number of shippers throughout the country who, right now, are buying second-hand fibre boxes for rail transportation of their shipments." He referred to a nation-wide survey made by the weighing and inspection bureaus

TABLE I—FREIGHT LOSS AND DAMAGE UP 26.3 PER CENT

Freight loss and damage for the first three months of 1948 totaled $34,100,969, compared with $26,999,758 in like period of 1947.

Claim payments on individual commodities which increased more than the average of 26.3 per cent follow:

	1948	% Increase over 1947
Plumbers' goods	$ 372,440	119.1
Refrigerators	343,688	104.6
Sugar	457,413	104.3
Furnaces, radiators, etc.	341,615	92.8
Sewer pipe & drain tile	371,598	90.0
Flour & other mill products	994,456	88.9
Fresh meats, P.H. products, dressed poultry	540,385	85.3
Stoves, ranges & parts	675,253	79.2
Agricultural implements & parts	82,286	63.7
Iron, steel, inc. wire	667,687	57.5
Coal and coke	676,049	55.8
Grain	1,832,532	52.8
Machinery (other than agricultural)	694,644	50.1
Brick, art, stone & building tile	288,844	49.8
Enamelware; washing machines enameled	159,602	47.8
Dry goods, clothing, etc.	1,081,214	39.5
Food products in cans and packages	2,051,960	33.0
Other manufacturers & miscl.	6,449,399	28.1
Furniture (new)	2,732,941	26.4

For the 12 months ended March, 1948, the loss and damage account totaled $129,317,162, compared with $100,205,371 a year previously, an increase of 29.1 per cent. In the same 12 months' period, increases as follow were reported for the causes stated:

Unlocated damage and improper handling	25.7 Per Cent Inc.
Delay	55.3 " " "
Defective equipment	40.8 " " "
Concealed damage	33.3 " " "

which developed 14 firms in New York city alone advertising used fibre-board shipping containers, 12 such firms in Chicago, 10 in Philadelphia, six in Kansas City, and so on, who were being patronized by shippers of articles which require the best in packing protection. "Unquestionably," Mr. Peters declared, "this practice of using second-hand boxes for new shipments is substantially increasing transportation damage."

In closing, Mr. Peters listed the following actions by which shippers and consignees could help prevent loss and damage of freight:

(1) Shippers to make sure that products are being packed and loaded with reasonable protection, checking periodically with customers;

(2) Consignees to report immediately to shippers all cases where damage is resulting from failure to follow established good practice in loading of cars, or where the packaging is not protecting the article as it should, noting the effective use which can be made of photographs in this connection; and

(3) Shippers and receivers to take a greater interest in loss and damage and assist the prevention committees of the shippers advisory boards by attending meetings and contributing to the success of the "Perfect Shipping" campaigns.

The board passed resolutions, most of them unanimously, to the effect;

(1) That O.D.T. Orders 1 and 18A, and all others outstanding, be repealed coincident with the close of the Office of Defense Transportation in February, 1949. It was felt that the provisions of these orders had come to be considered normal by the railroads, that their consideration of freight car requirements had come to be based on the existence thereof, and that compliance with the heavy loading provisions was working a hardship on shippers;

(2) That the transportation tax be repealed;

(3) That the freight car construction program be increased from 10,000 to 12,000 new cars each month;

(4) That prewar standards of l.c.l. service be restored —existing serving being unsatisfactory and resulting in slow and inefficient operation for shippers and receivers; and

(5) That the campaign for damage prevention be a daily program throughout the year, with April still reserved for extraordinary stress on "Perfect Shipping."

Warner B. Shepherd, assistant general traffic manager, Aluminium Company of America, Pittsburgh, Pa., was elected president of the association for the ensuing year. F. J. Rebhan was elected first vice-president; F. J. Armstrong, traffic manager, U. S. Radiator Company, Detroit, Mich., second vice-president; and Frank Cross, district traffic manager, General Mills, Inc., Oklahoma City, Okla., secretary.

Communication . . .

Sees Railroads Pricing Themselves Out of Business

COLUMBIA, S. C.

TO THE EDITOR:

It was with some amusement that I read your editorial entitled "Forcing Continuance of Unprofitable Trains" (page 26 in the July 17 *Railway Age*). I fear, however, that the "local people" are already so educated in the "fundamentals of transportation economics" as practiced by our railways as to require more than verbal assurance that the corporate operators consider the public welfare in terms other than their own net earnings.

Your eyes were no doubt moist as you wrote of the terrific $50,000 annual loss sustained by the railway in its operation of a Nashville-Memphis overnight service. You were moved by the self-serving ignorance of the trainmen who displayed an inexcusable selfish interest in the preservation of their livelihood. But nowhere in the article do I note any sense of concern for the weary salesman anxious to make his way to Nashville after a hard day in Memphis. On the other hand, he's just a pay passenger and scarcely is worthy of consideration.

A new concept (or, perhaps, a now openly admitted theorum) is that the railroads are no longer to be burdened with any responsibility of rendering service that does not yield a bountiful return—around 5 per cent according to the recent series of advertisements. The railways apparently wish a full return from every revolution of the wheels. No longer do we hear of "public convenience and necessity." The slogan now approximates: "Yank it off if it doesn't pay and let the people ship and travel any blamed way they please." Those like myself who constitute the humble passenger in lower ten and the traveler to the small town feel no pangs for the corporations who make it truly obvious that their thoughts are hardly on our welfare.

As a matter of fact, the public can scarcely rally to the support of the systems because of the inconsistent philosophy with which we are confronted. A matter of common knowledge is that the rail lines are by economic and technical reality mass production instruments of transportation. We agree that the passenger train or other unit operating at a financial loss and rendering little actual public service is a cost and a drain on the structure of the nation no less than of the owning carrier. On this there can be no argument. Yet the fault lies not in the fact that the public does not need such a train but in the truth that the rate structure prohibits the public from utilizing the train except by transfering the loss from the carrier to the individual passengers. In other words, the railways are *mass* haulers. Yet they persist in setting rates at a *selective* level—thus defeating their own social usefulness and fair return of profits. No one can feel particular distress at the spectacle of an industry deliberately pricing itself out of popular favor and existence. The real tragedy lies in the thought of the government ownership and socialization that will certainly complete the story as the people eventually must demand the service and facilities that are being gradually withdrawn by the private owners.

I do not believe that the American public will permit the railway corporations to reduce their operations to a few main trunk lines connecting heavily populated centers. The trend and purpose of that plan on the part of the carriers is obvious. You cannot "educate" the people into the virtues and rewards of private ownership. The survival of our American standards and values will depend upon whether the railways and other industries antagonize the populace or afford continuing proof that under present ownership the needs of that populace can be satisfied.

ROBERT G. HORINE

1946 FREIGHT TRAFFIC WAS 85.7 PER CENT OF "POTENTIAL"

Class I railroads in 1946 failed by 234,237,000 tons to maintain their 1928 position as carriers of freight originating from production in this country, according to the latest study of "Fluctuations in Railway Freight Traffic Compared with Production," which has been issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. Based on the 1928 situation as 100, the 1946 ratio of actual railway tons to "potential" railway tons was 85.7 per cent, as compared with 88.4 per cent for 1945, 90.8 per cent for the most favorable war year, 1943, and 78.4 per cent for pre-war 1939.

Revenue 91.9 Per Cent of "Potential"

The net loss in railway freight revenue in 1946 is put at $539,236,000, the ratio of actual to "potential" revenue for that year having been 91.9 per cent. In the three preceding years, the actual revenue was above the "potential" revenue. In explaining the failure of these revenue indices to parallel those for tonnage, the statement points out that the revenue figures are affected not only by changes in the volume of production, but also by such factors as changes in freight rates, shifts between high-rated and low-rated commodities, and changes in the length of haul.

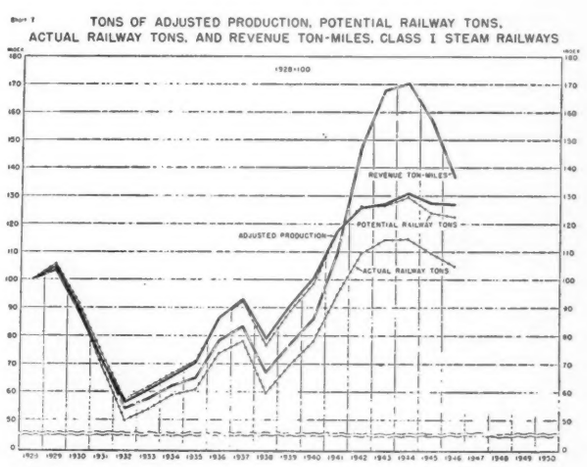
The study (Statement No. 4820) was prepared by E. S. Hobbs, former statistical analyst of the bureau, who has retired. It is similar to previous ones, also prepared by Mr. Hobbs, that covering 1944 data having been reviewed in the *Railway Age* of January 18, 1947, page 191. Like its predecessors, the present study computes indices, based on 1928 as 100, of production, potential railway tonnage, and actual railway tonnage. Potential tonnage is the amount the railroads would have carried each year if they had maintained their 1928 position. Against this potential tonnage, the actual traffic is set up; and the differences between the two measure the railroad losses.

If the railroads had maintained their 1928 position they would have carried in 1946 a total of 1,634,161,000 tons, or 122.5 per cent of their 1928 traffic. Actually, they carried 1,399,924,000 tons, or 104.9 per cent of the 1928 business. Stated otherwise, the Class I roads carried 46.8 per cent of the country's 1928 production, whereas they handled only 38.2 per cent of the 1946 output. The latter compares with 39.7 per cent in 1945, a wartime peak of 41.5 per cent in 1943, and 35.8 per cent in pre-war 1939.

Commodity Group Figures

Data by commodity groups show the following 1946 ratios of actual tons to potential tons: Products of agriculture, 92.3; animals and products, 61.6; products of mines, 97.2; products of forests, 90.4; manufactures and miscellaneous 71.1; all l.c.l. freight, 51.7. Percentages of total production in each group, which the railroads handled in 1946 and 1928, respectively, are as follows: Products of agriculture, 30.2 and 39; animals and products, 46.4 and 72.8; products of mines, 45.2 and 51.2; products of forests, 32.5 and 30.8; manufactures and miscellaneous, 31.3 and 43.2; all l.c.l. freight (per cent of total production), 0.7 and 1.3.

The breakdown of the group data by commodity classes shows that the 1946 traffic in 57 classes was greater than the potential. Thus the failure of the railroads to maintain their 1928 overall position was due to losses in 100 commodity classes. Classes wherein the 1946 traffic was greater than potential included


TONS OF ADJUSTED PRODUCTION, POTENTIAL RAILWAY TONS, ACTUAL RAILWAY TONS, AND REVENUE TON-MILES, CLASS I STEAM RAILWAYS
1928=100
REVENUE TON-MILES
ADJUSTED PRODUCTION
POTENTIAL RAILWAY TONS
ACTUAL RAILWAY TONS

Adjusted production, compared with actual and potential railway tons and revenue ton-miles

barley and rye, wheat flour, bananas, flaxseed, dressed poultry, green hides, bituminous coal, coke, ores and concentrates n.o.s., crude phosphate rock, pulpwood, turpentine, crude rubber, linseed oil, molasses, iron and steel (rated sixth class in Official Classification) n.o.s., lead and zinc (ingot, pig or bar), aluminum (ingot, pig or slab), machinery and boilers, brick n.o.s. and building tile, tractors and parts, assembled auto trucks, metal furniture, beverages, printing paper n.o.s., explosives n.o.s., cotton cloth and cotton fabric n.o.s., tobacco (manufactured products) paper bags and wrapping paper, building paper and prepared roofing materials, building woodwork (millwork), and soap and washing compounds.

The explanatory statement notes that the present study will be the last of the series based on the 157 commodity classes in use prior to 1947. The new classification with 262 classes became effective January 1, 1947.

ERIE'S "NAVY" GETS FLOATING DRY DOCK

New unit permits underwater repairs to be made at this road's marine terminal and thus eliminates heavy dock charges at private shipyards

By A. A. VISINTAINER*
Engineer of Structures, Erie

Underwater maintenance and repair of most of the 234 units of floating equipment operated by the Erie in New York harbor are now being carried out on a new welded steel floating dry dock, believed to be the only one of its kind owned by a private fleet operator in this district. The new dock, which was recently placed in service at the Erie's marine terminal at Jersey City, N.J., permits more effective use to be made of the terminal which, although improved and enlarged in 1942, was not equipped to make repairs to vessels below the water line. Thus, formerly, when hull repairs and other underwater work were necessary, vessels had to be taken to a private shipyard for dry-docking, resulting in considerable lost time for the vessels and tugs as well as additional expense.

A floating dry dock is a submersible, shallow-draft vessel, with parallel wing walls on each side, which rise vertically above the deck. The hull and the wing walls are constructed with a number of cells, or tanks, which can be flooded to cause the dry dock to sink. When submerged, a vessel requiring under water repairs is towed into position above the deck and made fast to the wing walls. The tanks are then pumped out, or dewatered, raising the dry dock and, with it, the vessel to be repaired. On completion of the repair work, the dock is again submerged and the vessel towed away.

The Erie's new dock is entirely of welded steel construction and is designed for a normal lifting capacity of 400 tons and a maximum load of 700 tons. It is 130 ft. long, over-all, and has an extreme width of 60 ft. The wing walls are 19 ft. high above the deck and 110 ft. long with 48 ft. inside clearance. The bottom of the vessel is 8 ft. below the deck, thus making the total height 27 ft. When floated light, the dock has a draft of 3 ft.

Has Six Flooding Tanks

The dock structure is divided into six independent flooding tanks—three on each side of the center line. Each tank extends from the center-line bulkhead to the side of the dock and then upward in the wing walls, to a safety deck, 11 ft. above the main deck level. Four buoyancy compartments are provided in the dry dock, one being at each end of the hull, while the other two are in the wing walls above the safety decks. The buoyancy compartments are completely sealed to prevent their flooding. Normally, the main deck is 5 ft. above water, but, when the dock is fully submerged, its deck is 15 ft. 6 in. below water.

The dock is submerged by opening six 10-in. flooding ports—one for each tank—to allow the tanks to fill with water. About 20 min. are required to fill the tanks completely and submerge the dock to maximum depth.

Floating the dock is accomplished by pumping out the flooding tanks by means of vertical centrifugal pumps—one for each tank—rated at 1,100 g.p.m. Each pump is driven by its own electric motor, located on the safety deck, the pumps and motors being connected directly by vertical stainless-steel shafts. The pumps discharge through sea cocks 8 in. in diameter. To float the dock requires 51 min. of continuous pumping.

Emergency Valves Provided

The flooding tanks are connected in pairs by gate valves in the center-line bulkhead so that, in case of a pump failure, the corresponding pump on the opposite side of the dock can be used to dewater both tanks.

All operating controls are mounted on a single panel in a small control house on top of the port side wing wall. The flooding and discharge ports are opened and closed hydraulically, but provision has been made for hand operation, if necessary. The emergency valves in the center-line bulkhead are opened by hand controls on the safety decks.

The dry dock is moored directly alongside the Erie's Pier 1. The pier slip, directly at the site of the dock, was dredged to a depth of 29 ft. below low water so as to permit complete submergence of the dock. Six pile clusters were driven on a line 75 ft. north of and parallel with Pier 1 as protection for the dock.

A permanent platform 10 ft. wide extends 16 ft. into the slip, at pier level, directly west of the dry dock. A narrow catwalk extends 19 ft. farther into the slip, beyond the platform, and is used by the dockmaster when centering vessels on the dry dock. A hinged ramp, that rises and falls with the dock, connects the dock and the platform and provides access for men and materials.

The Erie fleet in New York harbor includes five ferries, 11 tugs, 27 car floats, four self-propelled lighters, 111 barges, 61 scows, one steam derrick and 14 gasoline-hoist lighters. These are being augmented in 1948 by a new tug, two car floats, and 25 new barges and scows and in 1949 by five new floats and 25 barges

*Mr. Visintainer died on September 27, as reported in *Railway Age* of October 2, page 74.

and lighters. Except for the ferries, the car floats and the derrick, all of this floating equipment can be handled in the new dry dock.

How Vessels Are Supported

When a vessel is repaired in the dry dock, its weight is concentrated on keel blocks located on the center line of the deck. Transverse structural-steel frames below the deck, spaced 7 ft. 6 in. apart, distribute this load evenly over the bottom of the dock. The keel blocks are located directly over the frames and midway between them. Movable bilge blocks, located over the frames, support the ship laterally.

The keel blocks and bilge blocks are made of several layers of heavy timber and may be adjusted with respect to height. The top pieces of the bilge blocks are shaped so as to conform to the contour of the hull of the vessel being raised. The bilge blocks are moved into position after the dock has been submerged and the vessel has been secured in position. This is done by means of hand-gear controls located on top of the wing walls.

A 24-in. slot, with hinged cover plate, is provided at the aft end of the dry dock for use in dropping rudders of self-propelled equipment. A 3-ton power hoist on the aft end of the port wing wall facilitates the removal of rudders and propellers.

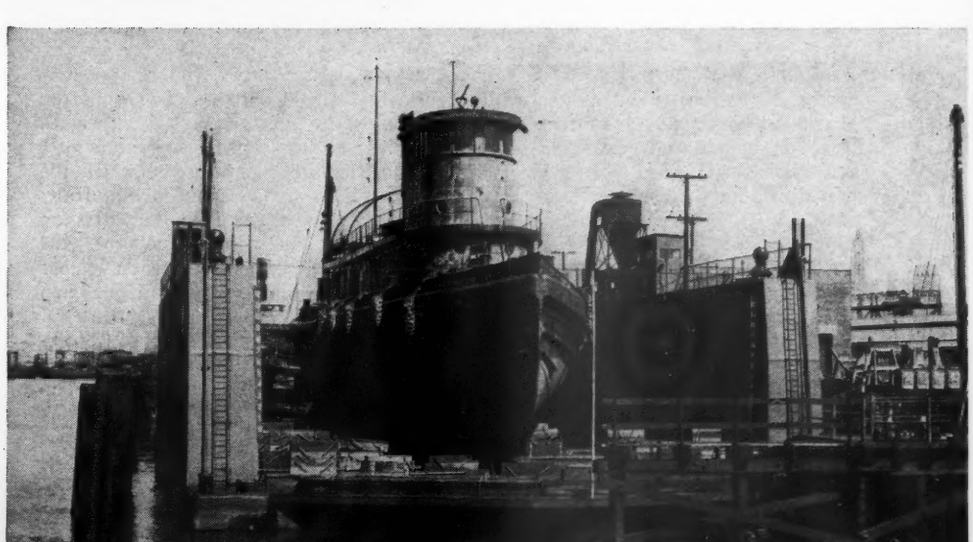
To protect it against corrosion from impurities in the sea water, the hull of the dry dock was given a heavy bitumastic coating to a height of one foot above the normal water line. The interiors of the floating tanks were given a heavy grease-like coating and the deck was finished with a 1-in. mastic wearing surface. The surfaces above the hull were painted standard box-car color and decorated with the Erie's diamond insignia.

The dock was designed and constructed under the general direction of I. H. Schram, chief engineer of the Erie, the writer, and M. B. Roderick, superintendent, Marine department, in cooperation with the Dravo Corporation, Pittsburgh, Pa. The component parts of the dock were fabricated and assembled at Dravo's Neville Island plant, near Pittsburgh, and were shipped by rail to that company's shipyard at Wilmington, Del., where the final assembly was performed. On completion the dock was towed 225 mi. to the Jersey City terminal.

The dock is operated by a dockmaster and a crew working under the general supervision of Mr. Roderick and T. Wouters, master mechanic, marine repairs.

Above—The dry dock afloat and being made ready for lowering to receive a tug that requires hull repairs

Left—A tug is maneuvered into position on the submerged dry dock for lifting



Right—The dock is again raised—this time with the tug securely blocked in place

GENERAL NEWS

Railroads Now Seek 13% Rate Increase

Proposed freight-rate advance raised 5%; interim relief asked

Acting promptly to fit their future revenues to the expense pattern indicated by the 10-cents-per-hour wage increase granted to employees represented by the Brotherhood of Railroad Trainmen and Order of Railway Conductors, the railroads on October 12 amended their Ex Parte 168 freight-rate petition, raising from eight to 13 per cent the proposed general increase and at the same time asking the Interstate Commerce Commission to grant interim relief on the basis of the original petition. The amended proposal also raises to higher levels the permanent adjustments sought in rates on commodities accorded exceptional treatment, i.e., the cents-per-ton increases proposed on coal, coke and iron ore, and the cents-per-100-lb. maxima which would limit the general percentage increases as applied to rates on fresh fruits and vegetables, lumber, and sugar.

Estimated Yield $1,050,000,000

The supplemental petition estimates that the advances it proposes would yield additional annual revenue of $1,050,000,000 on the basis of anticipated 1949 traffic volume. That would be $377,500,000 more than the anticipated annual yield of $672,500,000 from the proposals of the original petition filed October 1; but it is pointed out that extension of the 10-cent wage increase to all employees would cost $371,000,000 a year. "It is recognized," the supplemental petition says, "that this rate of wage increase sets the pattern for all other classes of railroad employees."

Filing of the original petition and the commission's action setting it for hearing on November 30 were noted in the *Railway Age* of October 9, page 72. Immediate authority to publish the necessary tariffs on one day's notice is sought in the motion to make these original proposals effective as a measure of interim relief. Meanwhile, the motion requests hearing or oral argument this month—if the commission concludes that either should be held "as a condition to the granting of the interim relief."

The increases in operating expenses, which prompted the filing of the original petition "are now being incurred," the motion says. Costs will rise further as a result of the wage settlement with the two operating unions, which became effective October 16, it adds; and it proceeds to argue that "it is highly important in the public interest that [the railroads] be authorized to increase their freight rates and charges to the extent that will offset these additional operating expenses, just as soon as it is possible and without awaiting the delays what may ensue pending the hearing and determination of the carriers' petition in its entirety."

Because the carriers "are confident that the interim increases proposed are substantially less than the increases that will ultimately be found by the commission to be just and reasonable," they stipulate in the motion that if the increases ultimately authorized are less than the interim increases, they will "promptly honor reparation claims pursuant to appropriate authorization of the commission." In making this stipulation, the railroads, as they put it, are "desirous of removing, or at least minimizing, opposition to this motion for interim relief and of expediting its favorable consideration."

The supplemental petition introduces its new permanent-increase proposals with a citation of the original petition's statement to the effect that its proposals were based on costs prevailing at the time of its filing; and that if there should be further increases in expenses, "it will be necessary to bring the changed situation to the attention of the commission." The general 13 per cent increase would apply to the same rates and charges, including switching rates and charges for accessorial and other services, that would have been raised eight per cent under the original proposal.

Specific Increases Proposed

The increases proposed on coal and coke are raised by 10 cents per net ton and 11 cents per gross ton, becoming 40 cents and 45 cents, respectively. The proposed iron-ore increase is also up 10 cents, from 25 cents to 35 cents per ton, net or gross as rated; but the exemption remains for movements from the Missabe range to upper Great Lakes ports for transshipment by water.

The maximum amount by which the percentage increases on fresh fruits and vegetables would be limited is up from eight cents to 12 cents per 100 lb., while the like limitation on lumber and sugar is up from five to eight cents per 100 lb.

The estimated annual yield of $1,050,000,000 would bring the prospective 1949 net railway operating income up to about $1,352,000,000, according to figures in the petition. That would be a return of about 5.75 per cent on net investment. On the basis of present rates, the prospective 1949 return is put at 2.98 per cent, the estimated net railway operating income being $701,000,000. Jacob Aronson, vice-president and general counsel of the New York Central, is serving as chief counsel for the railroads in the case.

Army Needs Healthy Transport Industry—Gray

Army Transportation Association holds third meeting at New Orleans

"The Army must foster a strong and healthy transportation industry in the United States and must have the knowledge of how to utilize it," declared Gordon Gray, assistant secretary of the Army, in an address delivered at the third annual convention of the Army Transportation Association in New Orleans on October 4 and 5.

Members and guests of the association, which was formed during World War II to furnish a point of contact for active and reserve Army officers interested in transportation matters and civilians in the transportation industry, heard a number of addresses covering virtually every phase of domestic and foreign transportation, with particular reference to relations with the armed forces and preparedness for possible military emergencies.

Elected president of the association for the forthcoming year was Harry F. Chaddick, president, Standard Freight Lines, Chicago. Elected vice presidents were Maj. Gen. John J. Mangan, administrative assistant to the president, Fifth Avenue Coach Company, New York; Col. John K. Hiltner, general traffic manager, U. S. Pipe & Foundry Co., Philadelphia, Pa.; George W. White, district manager, American-Hawaiian Steamship Company, Philadelphia; Col. Charles F. Nielsen, Lockheed Aircraft Corporation, Burbank, Cal.; and Arthur H. Gass, chairman of the Car Service division, Association of American Railroads, Washington, D. C.

Permanent Transportation Corps

"The Transportation Corps, by whatever name it may be known, has a

permanent place in the military establishment," asserted Assistant Secretary Gray. He told his audience that, "in the short and long range planning of the Army Department, every step contemplates the maintenance of a transportation division."

"By such means the mistakes of the past will be overcome," he said, recalling that, "in the midst of a frantic preparation for war, there was glaring lack of a unified army transportation service to meet needs which were all self-evident. Shortly after World War I the Army had recommended that Congress create such a service, but no such law was passed." Thus, by the time the Transportation Corps was organized, most of the national resources in equipment and personnel were already involved in the war effort and the corps had great difficulty locating and securing technically qualified personnel, necessary equipment and materials.

He further said, "Without doubt, a great many of the transportation problems of World War II—and our failure to solve them quickly—grew out of faulty organization. In turn, such organization was the lusty child of our general overall unpreparedness and our frantic effort to arm ourselves in the midst of war.

"There were entirely too many transportation duplications and overlappings in the services—and too much interservice rivalry. The Army and Navy had too many parallel installations—such as port facilities, for example. There were duplicate Army and Navy transports, air transport systems, inland transportation divisions, and other such installations, equipment and operations."

It is preparedness which will enable us to do the transportation job quicker, cheaper and better in a future emergency, he added. "To help bring about preparedness in its field, the Army Transportation Corps—mindful of the importance of maintaining close liaison with the civilian economy and of taking advantage of the research and development work being carried on in the transportation industry—has taken steps through the Transportation Corps Technical Advisory Committee and the Army Transportation Association to learn the views of the industry concerning five specific problems that need solution.

"These problems are: (1) The development of a plan to integrate transportation facilities in time of war; (2) The development of ways to insure the control of all military freight in a national emergency; (3) The elimination of 'barriers' in the transportation field; (4) The preparation of a plan for providing an adequate system of railroad ground storage yards, and (5) The development of plans for utilizing highways and highway transportation during emergencies."

The speaker expressed the opinion that the Army has "certain outstanding responsibilities" in the field of transportation, which he summarized as follows:

(1) Through the Transportation Corps the Army must keep itself acquainted with and abreast of recent developments and operational procedures in water, motor, air and rail transportation activities. The A. T. A. is one means of doing this.

(2) The Army should keep itself fully informed of the railway industry's need for rails, cars, ties, locomotives, etc.; the shipping industry's requirements for vessels, fuel and docking facilities; the motor transport industry's need for buses, trucks, tires, and replacement parts; and the actual capacity and potentialities of military and commercial air transport. This is included in planning which is always going on.

(3) The Army must foster a strong and healthy transportation industry in the United States, and have the knowledge of how to utilize it, so that our logistical effort can support our strategical and tactical effort abroad, if and when the need arises.

(4) Close liaison, cooperation, and exchange of information between the civilian transportation industry and the A. T. A. in matters relating to equipment, operations, personnel, and research and development must be maintained at all times.

(5) The Army must plan for all possible emergencies. It must provide for an adequate reserve of trained manpower of highly technical and professional skills, and for effective coordination of all transportation activities.

Berlin Blockade Shows Value of Rails

The current Berlin air-lift "is the most dramatic exhibit of our times to show that when you carry quantities of heavy goods across land by means other than steel rails you encounter appalling costs, uncertainties, and slowness," according to J. E. Payne, vice-president—traffic, St. Louis-San Francisco, who entitled his address, "Can the Railroads Meet Your Challenge?" Explaining his remark, the speaker asserted, "When I say slowness, I'm not talking about the time for taking one ton over the distance, but of the time between the first ton and the millionth ton. Last week our forces reported that they had gained only 15 per cent in their Berlin food stockpile in 100 days of blockade.

"If the same amount of money and manpower could have been spent, as a stunt, on moving goods into Berlin by rail, western Berliners today would be the fattest people in Christendom, and you couldn't drive a jeep through the streets without getting bogged down in coal."

Payne expressed the opinion that "this idle and silent track" is today the best known railroad in the world and "a world exhibit of the power and essentiality of the railroads."

With regard to the condition of the railroads, the speaker declared: "The railroads are better prepared to enter a national emergency today than in 1939 or on the day of Pearl Harbor. Next week our position will be even better; next month the gain should have been extended. Next year, unless we suffer some great and sinister blow such as a reparations assessment, we should have gained even farther over 1939 or 1941."

Nevertheless, he said the railroads have "two big worries"—steel and, to a lesser degree, other components of freight cars, and finances. He said that while the railroads are getting about 10,000 new cars a month, "we should be getting 12,000 if we are to be in an adequate position to meet this country's transport needs either in peace or in war." As for finances, he isn't worried so much about "the people who have risked their money by buying our securities," as "over the fact that they won't continue to buy our securities in support of our modernization program . . ." Bearing also on the unsatisfactory financial status of the railroads is the threat of both the reparations cases relating to war time rates and repayment of alleged overcharges by misinterpretation of the tariffs. Calling the reparations cases "an outrage in legality and morality," the Frisco vice-president believed "that all transportation people must agree and share with me the revulsion that I feel against the morality of these cases."

A great portion of the answers to the question whether the railroads can perform their mission successfully in the event of another emergency must come from the military planners, said the speaker.

"For instance, what is your answer to this question: While we still possess cantonments, airfields, war plants, ports, naval vessels, etc., the construction of which entailed a huge volume of rail movement which need not be repeated, to what extent would the burden upon the railroads be

NEWSMEN TOUR SOUTHWEST VIA KATY

Nearly 100 Eastern newspaper reporters and business and financial writers will conclude on October 17 a nine-day tour of the Southwest, conducted by the Missouri-Kansas-Texas. The tour, the second of its type conducted by the railroad, has covered the four states served by the road and enabled the cities in the area "to display their wares."

The trip, says Raymond J. Morfa, Katy board chairman, has given prominent newsmen "an opportunity to view first-hand the tremendous amount of progressive activity which permeates the Southwest and to see for themselves why this area is one of the most rapidly expanding sections in the nation today." Cities visited included St. Louis, Mo., Parsons, Kan., Dallas, Tex., Fort Worth, Houston, San Antonio, Austin, Wichita Falls, Waco, Denison, Tulsa, Okla., Oklahoma City and Muskogee.

lightened if we found ourselves at war before those facilities are obsolete?

"Possibly your answer to that question indicates that the rail burden would be lighter—or does it?

"There are other questions, which I cannot answer, which you perhaps can. Will our rails be disrupted by bombings, as were the German rails which received a major portion of the bomb tonnage we loosed against that country? Or by sabotage? Will new-type submarines sink a sizable portion of the tonnage which the rails will have moved to tidewater? Might coastal shipping or Great Lakes shipping be blighted to an extent that would test the railroads to the breaking point?"

Seeks Kind Treatment for Buses

Appeals for routing of draftees by bus; less restrictive control of that industry in the event of an emergency and the construction of as many superhighways as possible "at the earliest possible date," as a part of top military planning, were voiced at the meeting by S. R. Sundstrom, president, Pennsylvania Greyhound Lines, Cleveland, Ohio. The speaker expressed the belief that inter-city motor buses are better "than other forms of transportation," for the handling of recruits, asserting that buses can call directly at draft board headquarters, and can operate more frequently than other services. He believes, also, that buses are "better equipped" to handle personnel to and from war plants, since the only requirement "is a highway to and from the plant."

Mr. Sundstrom criticised government agencies, among other things, for their method of rationing tires and fuel during the war; for limiting the speeds of common carrier buses, for eliminating express and limited schedules, and for drafting too many men from the bus industry.

With regard to superhighways, he asserted: "It is my belief that top military planning should give consideration at the *earliest possible time to the construction of as many miles of similar highways as possible.* The company of which I am president, has operated over the Pennsylvania Turnpike since it opened in 1940. We have operated approximately 15 million bus miles over this 160-mi. stretch of road. Our experience has been that, first of all, we save a substantial amount of time as compared with the ordinary highways in the same territory—in fact 20 or 25 per cent. Our accident experience is only 10 per cent of what it is on other highways in the same territory. Third, there is less wear and tear on the equipment when there is no grade in excess of three per cent—which is the case on this highway."

I.C.C. Summarizes 1947 Accident Data

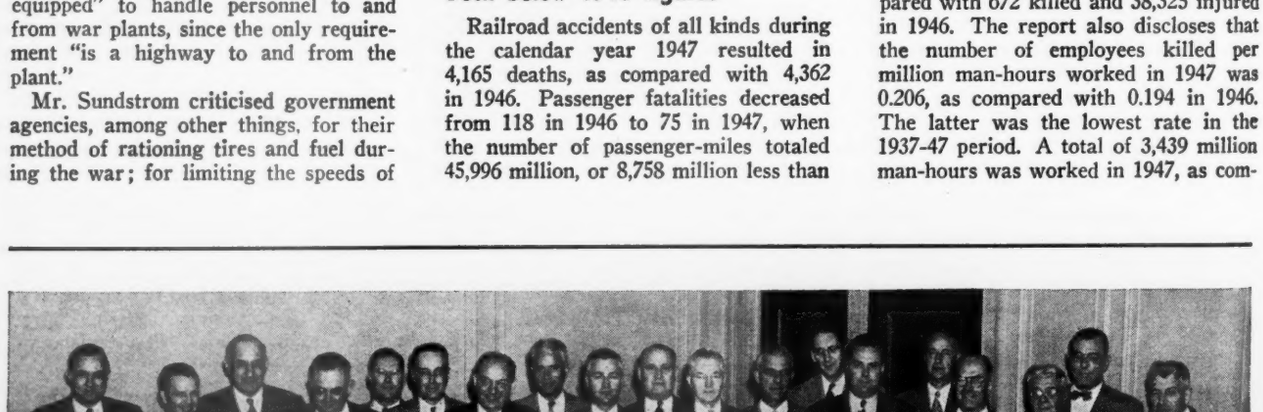
Fatality and injury rates Both below 1946 figures

Railroad accidents of all kinds during the calendar year 1947 resulted in 4,165 deaths, as compared with 4,362 in 1946. Passenger fatalities decreased from 118 in 1946 to 75 in 1947, when the number of passenger-miles totaled 45,996 million, or 8,758 million less than in the previous year, according to Accident Bulletin No. 116, issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The overall volume of traffic was 0.77 per cent less in 1947 than in 1946, as measured in train-miles, resulting in a fatality rate for 1947 of 4.04 persons per million train-miles, as compared with 4.20 persons per million train-miles in 1946.

A decrease of 6.17 per cent in the number of non-fatal injuries to all persons was reported in 1947, as compared with the previous year, the respective totals being 48,797 and 52,007. The 1947 figure is the lowest since 1942, when 48,108 non-fatal injuries occurred. The frequency rate for non-fatal injuries likewise showed some decrease in 1947 as compared with 1946, the figures being 47.3 and 50.1 persons per million train-miles, respectively. The number of non-fatal injuries to passengers also decreased from 5,676 in 1946 to 5,146 in 1947, but here the frequency rate was up from 87.6 to 111.9 persons per billion passenger-miles. The passenger-fatality rate, which was 1.82 per billion passenger-miles in 1946, dropped to 1.63 per billion passenger-miles in 1947.

Employee Injuries Down

Data on casualties to employees show that 709 were killed and 35,732 injured in accidents of all kinds in 1947, as compared with 672 killed and 38,325 injured in 1946. The report also discloses that the number of employees killed per million man-hours worked in 1947 was 0.206, as compared with 0.194 in 1946. The latter was the lowest rate in the 1937-47 period. A total of 3,439 million man-hours was worked in 1947, as com-



Y LUNCHEON ATTENDED BY NEGOTIATORS—Front row (left to right): H. W. McCauley, chief of personnel, Northern Pacific; David Robertson, president, Brotherhood of Locomotive Firemen & Enginemen; L. W. Horning, vice-president, New York Central; George E. Leighty, president, Order of Railroad Telegraphers; D. P. Loomis, executive director, Association of Western Railways; Alvanley Johnston, president, Brotherhood of Locomotive Engineers; H. A. Enochs, chairman, Eastern Carriers Conference Committee; Harry Fraser, president, Order of Railway Conductors; C. D. Mackey, chairman, Southeastern Carriers Conference Committee, and George Wright, Brotherhood of Firemen & Oilers. Second and third rows: Ralph Gould, assistant chief of personnel, Chesapeake & Ohio; F. L. Noakes, Maintenance of Way Employees; Fred N. Aten, president, Railway Employees Department, A.F. of L.; R. W. Blake, International Brotherhood of Electrical Workers; R. F. Welsh, executive secretary, Association of Western Railways; Paul Johnston, vice-president, Erie; Ed Weisner, International Association of Machinists; G. J. Willingham, manager of personnel, Illinois Central; J. W. Oram, chief of personnel, Pennsylvania; Jesse Clark, president, Brotherhood of Railroad Signalmen; Donald MacKenzie, Brotherhood of Railroad Trainmen; W. S. Baker, chief of personnel, Atlantic Coast Line; George Cusich, statistician, A.F. of L.; F. K. Day, Jr., assistant general manager, Norfolk & Western; H. E. Jones, executive secretary, Bureau of Information of Eastern Railways; G. B. Goebel, Brotherhood of Railway Clerks; H. A. Benton, director of personnel, Seaboard Air Line; T. C. Carroll, president, Brotherhood of Maintenance of Way Employees and A. J. Bernhardt, Brotherhood of Railway Carmen. An account of this luncheon was published in the *Railway Age* of October 9, page 94.

pared with 3,459 million in 1946. The rate of non-fatal injuries to employees per million man-hours decreased from 11.08 in 1946 to 10.39 in 1947, the lowest since the 1941 figure of 8.69.

With respect to injuries to employees, the bulletin makes the usual estimate of the monetary loss involved, on the basis of the "conservative value" of $8 per day per man. It calculates that 1,267,933 days were lost in 1947 as a result of non-fatal injuries to employees, and the resulting loss is put at $10,143,464. The comparable figure for 1946 was $11,031,960.

The bulletin also discloses that casualties among trespassers decreased from 1,542 in 1946 to 1,400 in 1947, while non-fatal injuries to such persons amounted to 1,179 in 1947, as compared with 1,161 in 1946. Trespasser fatalities per million motive-power miles (locomotive-miles and motor train-miles) were 0.86 in 1947, as compared with 0.96 in 1946, while the injury rate on the same basis was 0.72 for both years.

Crossing Accidents

Although there were 4,015 rail-highway grade-crossing accidents in 1947, as compared with 4,001 in 1946, the number of persons killed decreased from 1,851 in 1946 to 1,790 in 1947, while the number injured declined from 4,397 in 1946 to 4,251 in 1947. At the same time, there was a reduction in the number of pedestrians killed at crossings, the total for 1947 being 216, or 16 less than in the previous year. The number injured, however, rose from 110 in 1946 to 114 in 1947.

Passenger automobiles were involved in 64.03 per cent of the total number of grade crossing accidents in 1947, as compared with 64.98 per cent in 1946. For 1941, the last pre-World War II year, the comparable figure was 70.25 per cent. Motor trucks were involved in 974 accidents with trains in 1947, as compared with 891 in 1946 and 895 in 1945.

In 1947, two passengers and 19 employees on duty on trains were killed as a result of accidents at highway grade-crossings and 95 employees and 67 passengers injured. In 1946, 21 employees were killed and 95 employees and 25 passengers were injured. Damage to railway property as a result of train accidents at highway grade crossings (not including damage less than $150 in any accident) totaled $1,333,405 in 1947, as compared with $554,644 in 1946 and $699,668 in 1945.

Discussing train accidents (those resulting from train operation in which railroad property damage exceeding $150 occurred), the bulletin points out that the 1947 rate for such accidents per million motive-power miles was more than twice that of 10 years earlier—10.34 as compared with 4.82 in 1938. The 1946 rate was 9.67. There were 16,816 train accidents in 1947, compared with 15,556 in 1946. The 1947 total includes 9,404 derailments and 4,451 collisions.

Fixes Larger Commercial Zone For Davenport-Rock Island-Moline

Division 5 of the Interstate Commerce Commission has modified its definition of the commercial zone of Davenport, Iowa, Rock Island, Ill., and Moline within which motor carrier operations are exempt from regulation except as to qualifications and maximum hours of service of employees and safety of equipment. The modification, which makes the zone larger than the one previously determined, came in a report on further consideration in No. MC-C-329.

Plan New Chicago Bus Terminal

The Greyhound Lines plans to begin construction next year of a 22-story combination bus terminal and office building in Chicago's "Loop," at an estimated cost of $10 million. The structure, which is to be air-conditioned throughout, will require 18 months to complete. Greyhound management has described the proposed facility as the "world's finest and largest bus terminal." It is planned that buses will enter and leave the terminal underground, thereby reducing traffic congestion.

N. & W. Issues Booklet in Campaign for New Industries

The Norfolk & Western has published a 20-page illustrated booklet describing the possibilities for industrial development in the six-state territory served by the road. Part of the N. & W's national advertising campaign (See *Railway Age* of May 8, page 65), the booklet, which will be mailed to thousands of business executives throughout the country, contains 10 maps and many photographs, some in full color.

B. & O. and Bendix Stage Television Show on Train

The "first practical demonstration of television reception aboard a moving train" was staged October 7 by the Bendix Radio Division of the Bendix Aviation Corporation on the Baltimore & Ohio's "Marylander," operating between Washington, D. C., and New York. Representatives of the press and other guests saw the second baseball game of the World Series and other television programs broadcast from stations in Washington, Baltimore, Md., Philadelphia, Pa., Newark, N. J., and New York at different stages of the trip.

The reception was good. The pictures "came over just as clearly as any television which I have seen in taverns" was the way one of those aboard put it. The receiving set was specially designed by Frank R. Norton, Bendix's principal television engineer, working with two of his associates—Charles G. McMullen and David Fales. Mr. Norton was in charge of the demonstration on the train. B. & O. representatives included J. H. Wallis, communication engineer.

The main difference between the new receiver and an ordinary home television receiver is a specially designed faster automatic picture control. This circuit improvement, known as AGC (automatic gain control), automatically changes the receiver gain many times per second as the train is traveling. In this connection it was explained that the strength of television signals at a receiving point are of different intensity, sometimes within an area of a few feet. The new receiver also has a direct coupled video amplifier with provision for clipping all impulse noise that might otherwise be received to cause picture distortion.

Another feature of the equipment is a special type of antenna, designed by Mr. Fales, who is one of Bendix's antenna development specialists. The problem there was to develop an antenna which would work from any direction the train might be going and come within clearance limits (15¾ in. above the roof of the car). Two antennas were used, one for the low frequency television band from 54 to 88 megacycles and a smaller one for higher frequencies from 174 to 216 megacycles. Mr. Norton stated that the set would receive pictures "of entertainment quality" within a range of 25 miles from cities having video transmitters.

Katy Chief Says Too Few Know RRs Caught in "Squeeze Play"

The railroads today are victims of a gigantic "squeeze play" threatening the welfare of the greatest of our nation's basic industries, and a large part of the public and many within the industry do not realize it, Donald V. Fraser, president of the Missouri-Kansas-Texas, declared in a recent address before a group of Southwestern business men in Wichita Falls, Tex. The situation, said Mr. Fraser, demands the "deep and sympathetic understanding of the public and of railroad employees in particular," and should concern particularly the suppliers of railroad equipment and materials "whose very livelihood depends upon a healthy and progressive railroad plant."

The Katy president pointed out that the railroads' problems are intensified because of the "fallacious impressions" in the minds of so many people that the railroads are prospering with the biggest peace-time volume of business ever handled in their history. The railroad plant, said Mr. Fraser, is valued by the Interstate Commerce Commission at $22 billion, and on today's markets $35 billion would be required to reproduce it. The railroads in 1947 turned out only $9 billion of service (gross income), or a little over one-third of their plant value, while the producing plants of most industries turn out many times their value within a year, declared the speaker.

Continuing, Mr. Fraser said: "To provide needed improvements and expansions, the railroads have been forced to reduce working capital alarmingly —in other words, during high production years they have had to dip into savings which should be conserved for low production years. This is not a bright picture, yet it is essential for the welfare of our nation that the railroads continue and even increase their improvement progress."

Declaring that current inflationary conditions have "hit the railroads hard," the speaker told his listeners of the "disheartening lag" between advances in carrier costs and increases in rates, which "further saps the earnings of the railroads." This plight, he added, is accentuated because the time is rapidly approaching, if it is not already here, when the cost of transportation must be stablized within a price bracket the public will and can pay.

Commenting on "how the railroads can meet their mounting costs and still hold to a low transportation cost," Mr. Fraser said: "The answer depends upon the treatment accorded the railroads by labor, by the suppliers of railroad materials, the government, industry in general, and by the public. There must be some sacrifice of selfish profit motives, a real cooperative spirit, and a genuine sympathetic understanding and support of the railroad industry if it is to survive as a symbol of our free enterprise. The industry cannot be bled white, and at the same time expected to build for the future and continue to package its services at a price that will encourage rather than hamper the free flow of commodities and travel within our country."

Baton Rouge, Burlington Interests Join in Protest to I.W.C. Embargo

The city of Baton Rouge, La., the Baton Rouge Traffic Bureau, Inc., and the Baton Rouge Port Development Association have complained to the Interstate Commerce Commission that an embargo placed July 19 by the Inland Waterways Corporation, operator of the Federal Barge Lines, violates the Interstate Commerce Act and will have the "practical effect" of "completely and effectively" closing the port of Baton Rouge to all interstate inland waterway traffic except barge-load movements. The effect of the same embargo upon shipments moving to and from the port of Burlington, Ia., also was cited in another complaint filed with the commission by that city's Dock Board.

The complaints are similar to those filed during September by the Upper Mississippi Waterway Association and 16 other municipal and shippers' groups, as reported in *Railway Age* of September 11, page 78.

The Baton Rouge complainants told the commission that while the embargo permits barge-load shipments of not less than 400 tons, when to or from one consignor to one consignee, there are "very few" receivers or shippers of freight in that city who are in a position to handle minimum barge-loads of such tonnage.

"Fallacious" Thinking is Cause Of Many Economic Ills—Wiggins

A. L. M. Wiggins, board chairman of the Atlantic Coast Line and the Louisville & Nashville, and former under Secretary of the Treasury, told a gathering of insurance executives at Chicago, on October 7, that the "backwash of world events has resulted in trends in this country that are nibbling away at the foundations of individual freedom and individual opportunity." He further stated that "neither banking nor insurance can be preserved as private enterprises if they are indifferent to their responsibilities in preserving and supporting an effective and vigorous system of transportation in this country under private ownership."

Mr. Wiggins attributed many of our ills today to the "widespread acceptance of social and economic fallacies that were designed to find an easy way out of difficult situations or which promised Utopian results in the realm of the unknown and untried." Among these fallacies, he listed the following: :

(1) That government can perform with greater efficiency and secure more effective results than private business. Aside from any wastes and losses that result from political consideration, he said, the rigidities that arise from the nature of government itself result in loss of efficiency and frequently multiply the costs of an operation.

(2) That wealth may be distributed whether produced or not. In this connection Mr. Wiggins said: "When a man receives for his efforts an amount of money greater than society is willing to pay for the product of his efforts, someone must make up the difference. The sum total of the product of the efforts of the American people is all that can be distributed except through the confiscation of accumulated capital or mortgaging future income. . . . Such is the program and objective of the Communists." He referred to governmental subsidies and special grants to individuals or groups as "a seductive device for distributing unearned wealth." Many of those who demand that the federal government make up the difference between the price they want and the price society is willing to pay, fail to realize that such an operation is the foundation of state socialism, the speaker pointed out.

(3) That, by jacking up prices in the various segments of our economy, we can create prosperity for all. On this point Mr. Wiggins observed: "The true principle is that real wealth and real prosperity consist of the maximum production and distribution of goods and services, of all of the people of the nation. Merely inflating the economy by writing up price tickets will, in the long run, produce losses and failures rather than prosperity." He added that "this price-wage-profits chase cannot continue much longer or to a higher level without serious adverse effect on our whole economy."

(4) That some business men believe they may be able to save themselves and their lines of activities when others disappear in the "maws" of state ownership. Commenting on this fallacy, Mr. Wiggins stated: "If the history of the past half century tells us anything, it proclaims that state socialism is a social and economic philosophy that is directed against all forms of private business enterprise, that it is a chain reaction and when started it becomes merely a question of which segment goes first. No segment of our productive economy can draw its cloak about itself and hope to pass unnoticed on the other side of the road."

Concluding his address, Mr. Wiggins said: "The disturbing fact is that the proponents of these erroneous and fallacious theories are skilled in the use of propaganda, tireless in their efforts and have specific programs and objectives, while those of us who are convinced of the dangers and fallacies involved in these programs are too timid or too complacent to combat them. . . . Too rarely is the public exposed to solid and convincing facts that controvert these spurious claims. . . . That is where you and I come in. Men in positions of leadership command the respect of most thinking people. We can multiply ourselves under the freedom of speech and press through our influence with others. Therein lies our duty and our responsibility as citizens of the greatest freedom-loving nation of the world."

Five Hundred M.R.S. Veterans Unite at St. Louis

A total of 515 veterans of the Military Railway Service of World War II registered for their second annual reunion at St. Louis, Mo., on September 25. Ralph Jensen, superintendent, Minneapolis, St. Paul & Sault Ste. Marie, Chicago, was elected director-general of the M.R.S. Veterans for the ensuing year. Elected deputy director-general was Robert L. Lane, a non-railroader, and, secretary-treasurer, Carl Ridin, draftsman-inspector, building department, Chicago, Burlington & Quincy.

Major-General Carl R. Gray, Jr., Administrator of Veterans Affairs, was the principal speaker at the evening banquet. The general, who commands the General Headquarters, M.R.S. Reserve, declared that, as now constituted, the Service is developing apace, the War Department having already approved and activated, as reserve units, a general headquarters and three M.R.S. headquarters. Grand divisions are being formed and operating and shop battalions are being sponsored by railroads. In October General Gray will

confer with the War Department regarding means of developing M.R.S. units. He declared that he expected to convince the War Department the government would gain by treating M.R.S. units in a special way.

The speaker asserted that European railroad men "are still talking about things American railroaders showed them how to do." One of the great defects of European operation is insufficient daily mileage from locomotives. One of the chief means by which the M.R.S. raised the capacity of lines in Europe and North Africa was to increase this figure. General Gray recently received information from the French National Railroads that the American-built Pacific-type locomotives still in France are averaging 145 mi. a day, compared with 31 mi. a day generally over the system by all locomotives.

Of the 2,225 locomotives which the Americans sent to Europe, Poland was the single biggest buyer after the war. He did not know to what extent the Russians had broad-gaged the lines "behind the iron curtain" but suggested that the buying of so many standard-gage locomotives might have some bearing on the answer.

Colonel F. W. Okie, president, Union (Pittsburgh, Pa.), presented new by-laws of the organization. Important provisions thereof were that only men who were enrolled in M.R.S. units in active service during World War II for a period of 30 days or more are eligible for membership, and that annual dues are to be $1 a year, one-half of which is to go to affiliated units. The latter are defined as organizations of 10 or more members acting as intermediatory organizations between the national body and the members, with the right to hold meetings or disseminate information. The new by-laws were unanimously approved by the organization.

E. F. Barnes, Jr., special assistant to general superintendent transportation, Missouri Pacific, was in charge of arrangements for the convention.

Boston & Maine to Try Out Reduced Sunday Fares

A 50 per cent cut in fares for travel on Sundays between Boston, Mass., and 19 communities in Massachusetts, Maine and New Hampshire was established by the Boston & Maine beginning October 10.

The new rates will be effective for Sunday travel in either direction in coaches only. Fares will be the regular one-way fare for the round trip, with tickets for children under 12 and over 5 available at half the price of the cut-rate tickets.

In announcing the reduced rates, C. F. Palmer, passenger traffic manager, said they are "intended to encourage more travel on Sundays . . . to meet the competition of the private automobile and, of course, to provide more revenue for the railroad. The tickets will be sold at ticket offices only, but may be purchased in advance. They will not be sold on trains."

Machinery Institute Forms Technological Advancement Group

Formation of a new Council for Technological Advancement made up of 75 industrial executives has been announced at Chicago by William J. Kelly, president of the Machinery & Allied Products Institute.

The basic purpose of the council is to create better understanding of the part technological advancement must play in future development and security of the United States. Among the erroneous conceptions which the council will seek to correct, according to Mr. Kelly, are the following: That corporation profits are too high; that too much of industry's income is invested in plant and equipment; that a larger proportion of the income of manufacturing corporations should be distributed in dividends; that all loans for capital equipment should be curtailed; and that technology destroys more jobs than it creates.

Forwarder Permits Come Easier Than Trucking Rights

Reporting in a proceeding selected by interested parties to test its policy with respect to the issuance of operating permits to freight forwarders, Division 4 of the Interstate Commerce Commission has concluded that such permits "are to be granted with greater liberality than motor carrier permits." The report was in No. FF-95 (Sub-No. 2), which involved an application of Lufschultz Fast Freight of Chicago.

Except for a restriction against handling commodities imported or consigned for export, the division granted the application, thus authorizing Lufschultz, which has been operating between Trunk Line and New England territories and midwestern territory, to extend its service to Minnesota, North Dakota, Texas and California. Protestants, who made the proceeding a test case, were other forwarders who contended the application should have been denied on the basis of precedents established in motor carrier cases, and in view of evidence indicating that any business obtained by Lufschultz would be diverted from them.

The division's conclusion that forwarder cases called for "greater liberality" than motor carrier cases was based on that provision of the Interstate Commerce Act's section 410(d) which stipulates that the commission shall not deny a forwarder's application for authority to engage in a proposed service "solely on the ground that such service will be in competition with the service. . . . by any other freight forwarder or freight forwarders." As the division pointed out, this provision "has no counterpart" in Part II (the Motor Carrier Act). Meanwhile, the protestants stressed a provision of section 410(c) which stipulates that a forwarder permit shall be issued only after a commission finding that the proposed service "is or will be consistent with the public interest and the national transportation policy. . ." They further asserted that section 410(d) was not inconsistent with the principles evolved in motor carrier cases.

The division conceded that consideration should be given to the latter cases, but, with citations of court decisions, it added: "We are of the opinion that decisions under Part II. . . . should be considered where informative, but that they are not necessarily to be regarded as controlling under Part IV." In resolving the present controversy in favor of Lufschultz, the division made it clear that it did not think the commission was barred by section 410(d) from denying a forwarder application because of the potential effect of the proposed operations on existing forwarders.

"It is," the report said, "undesirable if not impossible to formulate and include in this report a general statement or rule by which it can be determined whether a permit should be issued. Every case must be decided in the light of its own special circumstances. . . . We do not mean to say that section 410(d) precludes denial of an application where it is shown that a proposed service would result in impairment of forwarder service in general within the affected territory. If a substantial impairment is threatened or reasonably to be anticipated in the event such new service is instituted, that result clearly would be contrary to the public interest and the national transportation policy. That, however, is not the situation here."

The majority report represents the view of Commissioners Mahaffie and Miller. Commissioner Mitchell, the other member of the division, dissented. "I do not believe," Mr. Mitchell said, "that Congress ever meant that we should grant additional authority to operate where it is clear, as it is in this case, that whatever business is secured under the new permit will be taken from the present forwarders."

Recommends Civilian Transportation in Event of Another War

A special "task group" of the National Security Resources Board has recommended, in the event of another war, the coordination of all types of transportation by a single temporary civilian agency and, subject only to "essential" emergency controls, the continuance of private operation of the transportation systems. The recommendations were revealed by Arthur M. Hill, chairman of N.S.R.B., in an address before the Navy Industrial Association at its September 29 meeting in New York.

They were made, Mr. Hill said, after the "task group" had studied an office

of Defense Transportation presentation, "Plans for the Mobilization of the Nation's Transportation System in the Event of War." O.D.T.'s views, Mr. Hill said, were submitted at the board's requests.

More Roads to Accept 'Phone Requests for Rail and Pullman Tickets

Fourteen additional railroads have extended to holders of Rail Travel Cards the privilege of making telephone requests for rail transportation and sleeping or parlor car tickets, to be prepared in advance and called for at station ticket offices at train time, according to an announcement by E. B. Padrick, chairman, Rail Travel Credit Agency, Chicago. The three roads already permitting this privilege are the Chesapeake & Ohio, Missouri-Kansas-Texas and Texas & Pacific. The roads that have joined in the plan are: Atchison, Topeka & Santa Fe; Chicago, Burlington & Quincy; Chicago Great Western; Chicago, Milwaukee, St. Paul & Pacific; Great Northern; Gulf Coast Lines; International-Great Northern; Kansas City Southern; Louisiana & Arkansas; Missouri Pacific; Minneapolis, St. Paul & Sault Ste. Marie; Northern Pacific; Spokane, Portland & Seattle, and Union Pacific.

Holders of Rail Travel Cards availing themselves of this arrangement are advised as to the time limit for sleeping and parlor car reservations. If tickets issued in advance are not canceled, or space released, in the time advised, bills will be rendered against subscribers for such tickets and are payable in accordance with the Pullman refund tariff.

Court Allows 8 Per Cent Hike In C. & N. W. Commuter Fares

Commutation fares of the Chicago & North Western were increased approximately 8 per cent recently when the superior court at Chicago granted the road a temporary injunction preventing the Illinois Commerce Commission from blocking the proposed boost. The road points out that the new fares will enable it to reduce by $170,000 its annual deficit of $2,000,000 on suburban service.

The North Western, along with other Chicago roads offering commuter service, was granted a permanent 20 per cent increase in commutation fares in May of this year by the commission (see *Railway Age* of May 15, 1948, page 210). However, because the carriers originally sought increases ranging up to 30 per cent, they have since pressed the commission without success, for the balance of their demands.

The Illinois Central, which has spearheaded the drive for higher commutation fares in company with the North Western, filed a petition with the state body on October 2, increasing commutation fares by 8 per cent effective on November 5 unless suspended by the commission. The I. C. states that it has lost $62,957 on its commuter service in the first seven months of this year and that the proposed increase will raise to 1 per cent the company's return on the property devoted to suburban services.

Freight Carloadings

Loadings of revenue freight in the week ending October 9 totaled 891,811 cars, the Association of American Railroads announced on October 14. This was a decrease of 16,770 cars, or 1.8 per cent, under the preceding week, a decrease of 65,051 cars, or 6.8 per cent, under the corresponding week last year and a decrease of 7,632 cars, or 0.8 per cent, under the equivalent 1946 week.

Loadings of revenue freight for the week ended October 2 totaled 908,581, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings

For the Week Ended Saturday,	October 2 1948	1947	1946
Eastern	160,316	165,961	165,529
Allegheny	188,821	197,031	190,036
Pocahontas	68,911	71,436	69,529
Southern	132,825	138,621	136,993
Northwestern	145,908	149,976	144,087
Cent. Western	139,974	148,442	138,246
Southwestern	71,826	70,988	62,748
Total Western Districts	357,708	369,406	345,081
Total All Roads	908,581	942,455	907,168
Commodities:			
Grain and Grain Products	49,237	50,477	47,317
Livestock	18,252	22,249	24,232
Coal	176,032	184,305	188,547
Coke	14,747	14,305	13,930
Forest Products	47,142	49,299	48,990
Ore	72,918	70,693	63,023
Merchandise l.c.l.	112,075	121,879	126,188
Miscellaneous	418,178	429,248	394,941
October 2	908,581	942,455	907,168
September 25	907,971	937,954	916,515
September 18	909,733	931,072	899,052
September 11	788,700	922,379	907,169
September 4	895,279	808,939	794,483
Cumulative total 39 weeks	32,922,309	34,048,127	31,325,540

In Canada.—Carloadings for the week ended October 2 totaled 90,771 cars, as compared with 91,402 cars for the previous week and 86,116 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
October 2, 1948	90,771	35,922
October 4, 1947	86,116	38,410
Cumulative totals for		
October 2, 1948	3,079,299	2,969,253
October 4, 1947	1,471,718	1,461,412

Still Want Control of New York Central, Says Robert R. Young

"We still have an interest in the New York Central and some day hope to control that road," Robert R. Young, chairman of the Chesapeake & Ohio, said on October 11. Speaking at a press conference on board one of the C. & O.'s new stainless steel passenger cars en route from New York to Philadelphia, Pa., Mr. Young also repeated his attacks on the "black market" in Pullman space, which he described as "symptomatic of the condition in which the railroads find themselves." Railroads have done nothing to correct this situation, the C. & O. officer added, and they are losing "millions of dollars of revenue every year" because the "big corporations and hotels tie up space" which is not taken up.

Mr. Young said he thought the railroads should work together to make possible the mass production of railroad cars. Working alone, he continued, the C. & O. had to approach the new equipment program economically and conservatively, but a program for "131 roads moving together" would permit the New York Central and the Pennsylvania to pay dividends from passenger revenues alone. The only alternative to mass production, which would mean standardization to some extent, he went on, is "Train X," now in process of completion by the C. & O. This train embodies all new ideas for more economical equipment, he said, and it is estimated that "Train X" will reduce standard costs by about 25 per cent.

Supreme Court Orders

The Supreme Court of the United States at its October 11 session granted the petition of six railroads for review of a case wherein the Circuit Court of Appeals for the Second Circuit has held that a forwarder which pays claims filed by its shippers under the claim clause of its bills of lading can recover from the railroad on whose line the loss or damage occurred without compliance with the claim clause of the bill of lading issued to the forwarder by the first railroad receiving the shipments involved. The case is docketed in the Supreme Court as No. 65, the forwarder being Acme Fast Freight, Inc., while the railroads are the Chicago, Milwaukee, St. Paul & Pacific, Delaware & Hudson, Delaware, Lackawanna & Western, Florida East Coast, Pennsylvania, and Wabash.

The action was originally brought by Acme in the United States District Court for the Southern District of New York for a declaratory judgment with respect to section 413 of the Interstate Commerce Act's Part IV. That section provides that sections 20(11) and (12) of Part I shall apply to freight forwarders and stipulates further that "the freight forwarder shall be deemed both the receiving and delivering transportation company for the purposes of such sections 20(11) and (12)." The latter relate to the issuance of bills of lading and the railroads' liability thereunder, and further provide that the issuing road or initial carrier shall be entitled to recover the amount of claims paid to shippers from the road on which the loss or damage occurred.

On the basis of these provisions, Acme contends that it is the "initial carrier" with respect to claims it pays,

and that it is subrogated to the rights of its shippers against the rail carriers. The district court rejected these contentions with a ruling to the effect that Acme is a shipper in its relationships with the railroads, and that, as such, it is required to comply with the claim clause of the railroads' bills of lading. The circuit court reversed this judgment, holding that while Acme was not a carrier, it might be considered one for the limited purposes of section 413; and that, as such, it was an initial carrier.

The railroads' petition to the Supreme Court said that the claim clauses of Acme and railroad bills of lading are identical in fixing a nine-months period in which a claim must be filed. It noted, however, that instances have occurred wherein Acme's shippers have filed claims within nine months, but Acme has failed to file its claims against the railroads in that time. The petition also pointed out that Part IV does not consider forwarders as carriers; and it added that, if Acme is thus not a carrier, "the claims clause of the railroad uniform bill of lading cannot be avoided by it except by preferential or discriminatory treatment."

Among the court's orders in personal-injury cases involving railroad employees was one granting review of a case wherein the Missouri Supreme Court set aside a $30,000 verdict won in a trial court of that state by a Missouri Pacific fireman who alleges that he contracted silicosis and was thus permanently disabled as a result of breathing silica dust contained in the sand used in the sanders of the locomotives on which he was firing. This case is docketed in the Supreme Court as No. 129, William T. Urie, vs. Guy A. Thompson, trustee of the Missouri Pacific.

The sand involved was tailings from lead and zinc mines, and Urie alleges that the silica dust escaped from defective sanders and was sucked up through openings in the cab floors of the locomotives. He based his case on the Boiler Inspection Act and the Federal Employers' Liability Act. In setting aside the jury verdict, the Missouri Supreme Court held that those acts were intended in turn to provide protection from, and recovery for, "accidental" injury, and did not cover all hazards of employment in interstate commerce, such the inhalation of harmful dusts here involved.

The M.P. brief asking the Supreme Court to deny the petition for review said that the record in the case disclosed "no evidence that other railroad companies used different or less harmful sand, took measures to make the decks of cabs airtight against dust or sand; or installed in their cabs fans, masks or respirators to avoid dust being breathed by enginemen." The brief added that it appeared from the record and "a search of authorities" that this is "the first reported case of a fireman or engineer seeking recovery for silicosis."

Another order of the court dismissed an appeal of two New Orleans taxpayers who had sought unsuccessfully to have the Louisiana courts declare invalid the amendment to that state's constitution which authorizes New Orleans to carry out its part of the plan for construction of a new union railroad passenger terminal in that city. The appeal was from a ruling of the Supreme Court of Louisiana, the case being Theophile O. Hotard and Allen H. Johness vs. City of New Orleans, et. al.

I.C.C.'s Space-Reservation Probe Assigned for Hearing

Hearings in connection with the Interstate Commerce Commission's investigation of railroad and Pullman Company rules and practices governing the reservation, sale and redemption of sleeping car, parlor car and reserved-seat coach tickets will open at Chicago on November 18. Subsequent sessions will be held at New York on December 20, Miami, Fla., January 18, 1949, and Los Angeles, Calif., February 28, 1949. Commissioner Mitchell and Examiner Mullen will preside.

The schedule was set out in an October 8 notice issued by I.C.C. Secretary W. P. Bartel. The proceeding, docketed as No. 30031, was instituted by an order entered by the commission on July 6 but not made public until August 26 (see *Railway Age* of August 28, page 62)

Secretary Bartel's notice said that the railroads and Pullman will be expected at the hearings to introduce evidence relating to their reservation and redemption rules and practices, with "particular emphasis" on the following:

(a) History and development to date of the provisions contained in the Pullman Company's redemption rules.
(b) Effect of the so-called 24-hour and 48-hour rules contained in the said redemption tariff on the cancellation of Pullman reservations prior to departure of trains.
(c) Amount and kind of sleeping cars and reserved-seat coaches ordered and delivered since August 1945 (including dates) and anticipated dates of delivery of balance on order.
(d) Typical instructions to railroad employees and actual practices relative to:
1. Acceptance of gratuities in connection with sale or reservation of passenger space.
2. Diagrams (both Pullman and reserved-seat coaches), time of opening, handling of requests for space made prior to opening of diagrams, time limit on consummation of sale after reservation is made, cancellation of reservation, resale or reassignment of cancelled-reservations, waiting lists, and will-calls.
3. Block reservations.
4. Withholding of space from sale through reservation bureaus on a "first-come, first-served" basis, including statements showing method of withholding space, by whom withheld, for what periods of time, for what purpose, for one typical day in 1948 (covering movement in both directions) on one representative reserved-seat coach train and one representative sleeping-car train of each railroad that offers reserved-seat coach, special schedule or extra fare Pullman service.
5. Revealing identity of reservation bureau personnel to persons requesting reservations.
(e) Steps taken to police:
1. Above-listed instructions and practices.
2. Provisions of Pullman redemption tariff, especially the no-redemption of tickets purchased for resale rule.
3. Activities of personnel of ticket offices and reservation bureaus.
(f) Arrangements with travel agencies or hotels concerning passenger accommodations.
(g) Records of:
1. Identity of persons or firms cancelling both Pullman and coach reservations on Seaboard Air Line trains at Miami during the month of February, 1948.
2. Total space available and percentage unused, by weeks or months and type of space, for both Pullman and reserved-seat coaches, on both southbound and northbound movements, during the period November, 1947, through April, 1948, on roads offering Florida service.

The Bartel notice also said that "evidence on experiences of the public in obtaining passenger accommodations, particularly by payment to anyone of amounts in excess of the published fares, will be received at all hearings."

F.C.C. Hears Additional Protests On Plan to Cut Radio Frequencies

The Federal Communications Commission this week had on record further opposition from the railroads and manufacturers of railroad radio equipment to the proposal of the commission to take from the railroad radio service 19 of the 60 frequencies now allocated to the carriers in the 152-162 Mc. band.

The views of the railroads and manufacturers were aired in the continuation of oral argument before the commission on its pending rule-making proposals, which include the cutback in railroad radio frequencies. As reported in *Railway Age* of October 9, page 71, the commission on October 6 heard objections to its plan—in so far as it would affect the carriers—from D. Worth Clark, former United States Senator from Idaho, who was retained as special counsel by the Association of American Railroads, and J. M. Souby, general solicitor of the A. A. R.

The A. A. R. presentation was followed by that of the American Short Line Railroad Association and 15 individual carriers—Atchison, Topeka & Santa Fe, Baltimore & Ohio, Chesapeake & Ohio, Chicago & Eastern Illinois, Chicago & North Western, Chicago, Rock Island & Pacific, Delaware, Lackawanna & Western, Denver & Rio Grande Western, Erie, Grand Trunk Western, Missouri-Kansas-Texas, New York Central, New York, Chicago & St. Louis, Seaboard Air Line and Union Pacific. The railroads seek a "full hearing" on the issue unless the commission decides to abandon its proposal.

The carriers told the commission that they eventually plan to make full use of radio in front-to-rear, train-to-train and train-to-fixed-point operations. At the same time, however, they declared that many problems have arisen in carrying out such a program, including those of power supply for freight train

cabooses, interference caused by tunnels and terrain obstacles and education of personnel to operate and maintain the radio systems.

The lack of expansion of the railroad radio systems also was attributed by the carriers to their Dieselization programs. In this connection, it was pointed out that most roads are replacing their steam locomotives with longer-range Diesel-electrics. As one carrier's spokesman put it: "Our management has determined upon a Dieselization program whereby we will eventually replace all of our steam power with Diesel locomotives. In the light of this situation, it would be highly uneconomical for us to attempt steam locomotive radio installations as a temporary project."

Commissioner (Miss) Hennock, who was making her first public appearance as a member of the commission was its most inquisitive member and the severest critic of the railroads' failure to make full use of the frequencies which have been allocated to them. She also expressed little sympathy when advised that the carriers were realizing approximately 3½ per cent return annually on their investment. "I'm only getting 2½ per cent on my government bonds," she remarked. Miss Hennock intimated she could not understand why the railroads put "everything"—including acquisition of new rolling stock and rehabilitation of their present equipment—ahead of the radio installation program.

The railroads, meanwhile, also told the commission that, because the equipment now available does not permit the use of adjacent channels, it would be impossible for them to operate on 41 frequencies, particularly in such localities as Chicago and New York. Such equipment, they said, will take from three to five years to develop. They also declared they are impeded from making front-to-rear installations because of agreements with labor under which the railroads are not permitted to run cabooses in through service.

Supporting the railroads' position were four manufacturers—Bendix Radio Division of Bendix Aviation Corporation, Farnsworth Television & Radio Corp., General Railway Signal Company and Railway Radio Telephone, Inc. Generally speaking, all urged the commission to abandon its proposal pending the development of equipment permitting the operation of adjacent channels.

R. B. Edwards, representing Bendix, said that railroad operating conditions, in so far as being adaptable to radio, are "the worst I've ever encountered," while A. A. Curry, spokesman for Farnsworth, declared that a reduction in the railroads' channels to 41 would reduce the usable channels to approximately 20. Such a number, he held, would be "totally inadequate" to serve the carriers' present needs. "The railroads and the radio industry in good faith have invested three years of intensive engineering effort and millions of dollars, only to find that the commission now has the red flag out and in addition is only too willing to blame non-performance on the railroads and the radio industry," Mr. Curry declared.

Harry Ockershauser, representing General Railway Signal, summarized his presentation with the assertion that the reason for the lack of progress by the railroads in radio is "due to the fact that the proper equipment has not yet been developed." "We do not agree with the commission's contention that the state of the radio art as applied to the railroads is sufficiently far advanced to provide operation with 60 kc. channel separation," he said. "It appears that further development work must be done. In view of the complexity of these problems, it is our opinion that such equipment will not be available for installation for several years."

Industrial Leaders See All Freight Absorption Outlawed

Many industrial leaders believe the Supreme Court ruling against multiple basing-point pricing has the effect of outlawing all "freight absorption" or "delivered price" methods, according to a survey by the National Industrial Conference Board on the economic effects of the court decision.

The survey shows general opposition to the decision among executives, who feel that, until Congress or the courts clarify the situation, industry must assume that f.o.b. mill pricing is "the only safe policy." The results of the survey follow closely the results of a similar survey of representative shippers conducted independently by *Railway Age*, and summarized on page 53 of the September 11 issue.

The preponderant majority of industrial leaders whose opinions were summarized in the board survey feel that the multiple basing-point system has a sound historical and economic background and should be continued. A "typical" reaction was the statement by a paper company executive that "the basing-point pricing system is based on sound economic reasons. Both producers and customers want the system, and to force another system by government fiat would cause serious and inequitable readjustments."

Other industrialists point to various detrimental effects they feel the decision will foster. These harmful results will not be immediately apparent, they say, since consumers are willing to shoulder almost any additional expense today to obtain scarce materials. The new ruling will have its effect, principally, they believe in reducing competition, raising costs and prices, and in dislocating industry.

An overwhelming majority feel that outlawing basing-point pricing will reduce rather than stimulate competition. Distant producers will be unable to compete with local plants wherever freight constitutes an appreciable portion of the total price. Strategically-located plants with no competitors nearby will be in a position to raise prices.

Smaller companies may be adversely affected by the ruling, according to many of the executives. Generally, it is noted, these are "one-plant organizations" which, by freight absorption, have been able to compete on a nation-wide basis.

No lowering in prices is looked for at this time as an accompaniment of a change to f.o.b. mill pricing. The short-term outlook is complicated by "the current inflationary trend in almost all prices" and a number of co-operators in the survey point out that the old basing-point prices are becoming the new f.o.b. mill prices. If the decision forces decentralization of key industries, which for economic reasons have remained centralized, it is believed higher unit costs may result.

Industry leaders believe abandonment of basing-point pricing will result in greater concentration of plant facilities. For every executive who looks for acceleration of the trend toward decentralization, there are 10 who expect greater centralization. They reason that the basic producers of raw materials cannot disperse their facilities economically.

The anomaly of one branch of the government calling for dispersion of industry and another issuing rulings which may have an opposite effect is noted by a number of executives. If f.o.b. mill pricing does result in greater centralization, it is believed such centralization will be regarded "with considerable trepidation" by the National Security Resources Board and the Munitions Board, the nation's two top industrial mobilization planning groups, since the agencies have gone on record as actively supporting wider dispersion of plant facilities for strategic defense reasons.

Fourth-Section Rates Need Not Extend to Whole Terminal Area

Reversing findings of prior reports by its Division 2, the Interstate Commerce Commission has made a 5-to-4 decision granting the Pennsylvania and Pennsylvania-Reading Seashore Lines fourth-section relief for the purpose of maintaining reduced rates to two water-competitive points in the Philadelphia, Pa., terminal area, despite the fact that the higher-rated intermediate points include other stations in that area. The report is in I. & S. Docket No. 5408.

The rates involved are on sulphuric acid in tank-car loads from Gibbstown, N. J., and Paulsboro to Tioga Street and Grays Ferry stations on the Philadelphia waterfront. In finding that the carriers had failed to show that the fourth-section-relief rates would not result in unjust discrimination in violation of section 2, Division 2 had relied mainly on its own report in *Bituminous*

Coal to Buffalo, N. Y., 219 I. C. C. 554. There it had denied fourth-section relief for the maintenance of reduced rates on coal to a limited number of delivery points in Buffalo having facilities to receive coal by water.

"No petition for reconsideration or further hearing was filed" in the Buffalo case, the commission says in the present report. It goes on to look over other relevant previous decisions by itself and pertinent rulings of the courts, concluding from such review that the present proceeding is "of a character different" from cases wherein it had been held that failure to maintain rate equality would constitute unjust discrimination.

"We are," the report continues, "unable to conclude that in the circumstances presented the proposed maintenance of a water-competitive rate to Grays Ferry and Tioga Street without the publication of the same rate for application to intermediate delivery points in Philadelphia, raises a presumption of unjust discrimination. We believe that in this proceeding as in other fourth-section proceedings concerning competition of rail and water carriers in which fourth-section relief was found justified, the water competition at the points where it exists raises a presumption that there are circumstances and conditions substantially dissimilar to those at other points, and that there is sufficient ground for fourth-section relief."

The dissenting opinion was written by Commissioner Splawn, and Chairman Lee and Commissioners Aitchison and Barnard subscribed to it. Presumably Commissioner Johnson, who is also director of the Office of Defense Transportation, did not participate, since there was no tie vote involved; and neither did Commissioner Patterson who was "necessarily absent." Thus the majority report would represent the view of Commissioners Mahaffie, Miller, Rogers, Alldredge and Mitchell.

In expressing the view of the dissenting commissioners, who would have affirmed Division 2's prior reports, Mr. Splawn explained that the majority report was in conflict with the Buffalo case decision mentioned above, and with the authorities cited in that decision, "among which are three opinions by the Supreme Court of the United States." He also said:

"It seems evident to me that the general discussion and erroneous conclusions in this report overlook the important fact that in applying the long-and-short-haul provision of section 4 of the act all of the delivery points within a recognized terminal switching district are considered as a unit. See *Lumber Rates on Pacific Coast*, 147 I. C. C. 13, 16, and cases there cited. So far as I am aware, this is the first instance in which this commission has attempted to cure apparent violations of section 2 as between different delivery points located within the same terminal district, by granting relief from section 4 which presumably is intended to authorize lower rates to these two delivery points than to other directly intermediate delivery points in the same terminal district."

Rail Rates Turning Mining Industry to Other Carriers

The mining industry directly or indirectly accounts for an estimated 80 per cent of the total tonnage handled by Class I railroads, which should "warrant favorable freight rate treatment," O. W. Tuckwood, general traffic manager of the American Smelting & Refining Co., said in an address before the recent convention of the American Mining Congress in San Francisco, Calif. "I don't think that any of us expect the railroads to subsidize the mining industry," he added, "but on the other hand we don't want to pay a share of the transportation burden that rightfully should be borne by some other commodity groups . . . We have already been affected by substantial freight rate advances since 1945 and at this very moment there is a petition on file with the Interstate Commerce Commission to further increase the rates on coal and coke and iron ore and that will be followed by another petition calling for further increases on practically all commodities as soon as the railroads have completed their latest wage increase negotiations.

"All of us recognize that the railroads are of vital importance to the industry," Mr. Tuckwood continued, "but as rail freighting costs advance that importance diminishes to the extent that more economical diversions can be made to other forms of transport. Already the dollar volume of business done by 'for hire' carriers operating on the public highways of this country amounts to $2,500,000,000 per year, or about one-third of the total railroad revenue, and trucks are handling almost one-fifth of the Class I railroad tonnage and nearly 85 per cent of all less-than-carload tonnage. The Transportation Association of America reports that truck trailers in service average 158 miles per day, while a railroad freight car averages but 45 miles per day, and that every ton of steel utilized in truck trailer equipment produces 476 per cent more ton-miles per day than every ton utilized in rail services. To my mind, all of this constitutes so much startling data on the trend of transportation progress and makes me wonder how much longer the railroads can maintain their preeminent position in mass transportation by land."

Mr. Tuckwood said he is not always in accord with the rate-making policies adopted by the railroads and that he quite frequently feels that for certain rail movements the rates are unduly high. "In some instances, notably in connection with the movement of nonferrous ores and concentrates on the basis of graded actual valuation rates, there is no doubt whatsoever but that the industry is being grossly discriminated against, and some very important traffic officials of Class I railroads have agreed with me in principle . . . The differences of one sort or another between the industry and the railroads do not affect in one degree my respect and admiration for the railroads and the capable men that are running those railroads. They literally had to run the wheels off their equipment during the war in the performance of a magnificent job. Since the war they, like you, have been hit with a series of wage and price advances, and they, like you, are having great difficulty in getting sufficient labor, materials and supplies to rehabilitate the plant.

"I doubt that many of you realize that in 1947 the railroads employed 312,000 fewer persons than in 1926-30," Mr. Tuckwood told his audience. "This clearly indicates improved efficiency. Improvements are being made right along in operating methods, which all help to lower transportation costs. However, with all that has been done thus far toward improving the railroad industry, they still have a colossal job ahead of them if it is their determination to reduce transportation costs to the point where diversions to competing forms of transportation are halted."

Additional General News Will Be Found on Pages 96-98

ORGANIZATIONS

The fall outing of the **Quaker City Association of Railroad Men** of Philadelphia will be held at Woodside near Cresco, Pa., on October 23 and 24.

The Atlanta, Ga., chapter of **Delta Nu Alpha Transportation Fraternity** has instituted a complete course in transportation and traffic management which is included in the curriculum of the University System of Georgia, Atlanta division. Completion of the course will require two school years of about nine months each.

An open forum, where shippers and receivers of freight will have an opportunity to discuss the shortcomings of the railroads with top operating executives of the New England lines, and where the railroad executives in turn will have opportunity to air the shortcomings of some shippers, will be one of the features of the **New England Shippers Advisory Board** meeting at Poland Spring, Me., October 20-22. Lau-

rence F. Whittemore, president of the New York, New Haven & Hartford, will address the meeting on October 21, his subject being "A Pattern for Cooperation."

Miss Caroline Hood, director of public relations, Rockefeller Center, Inc., who will be guest speaker at the October 19 meeting of the **Women's Traffic Club of New York, Inc.**, will have as her subject "Features in Public Relations." This meeting will be held in the Tower Club Rooms of the Park Central Hotel.

P. E. Griffith, superintendent of dining cars of the Wabash, at St. Louis, Mo., has been elected president of the **Association of American Railroad Dining Car Officers.**

The **Car Department Association of St. Louis** will hold its next meeting on October 19, at 8:00 p. m., at the Hotel DeSoto, St. Louis, Mo. A motion picture entitled "Manufacture of Chilled Car Wheels" will be presented at this meeting and a short paper on the same subject will be delivered by C. M. Stoner, executive vice-president, Association of Manufacturers of Chilled Car Wheels.

CAR SERVICE

The Interstate Commerce Commission has vacated Service Order No. 70 and Revised Service Order No. 396, both revocations having become effective October 1. The former order had restricted the number of diversions or reconsignments permissible on refrigerator cars loaded with fresh or green vegetables, while Revised Service Order No. 396 had required the reconsignment of refrigerator cars within 48 hours from the first 7 a.m. after their arrivals at diversion points.

The Office of Defense Transportation has issued General Permit ODT 18A, Revised-26B, effective October 7, which authorizes the loading of carload shipments of dressed poultry, whether fresh, chilled or frozen, to a weight of not less than 28,000 lb. in a refrigerator car containing 1,900 cubic feet or more of freight loading space, or to a weight of not less than 24,000 lb. in reefers containing less than 1,900 cubic feet of freight loading space. This is a relaxation of the previous loading requirements on that commodity.

The O.D.T. also has issued General Permit ODT 18A, Revised-42, effective October 7 through November 15, which authorizes the loading of Valencia oranges at not less than the applicable tariff carload minimum weight.

I.C.C. Service Order No. 828, effective from October 9 until December 31 unless otherwise modified, authorizes railroads serving points in California or Arizona to furnish, in lieu of each box car ordered, 2 to 4 refrigerator cars which are not suitable for transporting commodities requiring protective service. The reefers covered by the order are owned by the Atchison, Topeka & Santa Fe and Pacific Fruit Express Company. Not more than 4 of them may be furnished in lieu of each box car ordered for loading shipments of uncompressed cotton at origins in California and Arizona when such cotton is consigned to points in those states for compression; and not more than 2 may be furnished for shipments of compressed cotton from points in Arizona and California to points on the Southern Pacific, Texas & New Orleans, Union Pacific, and Santa Fe.

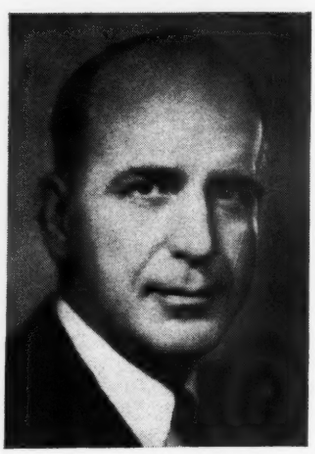
Chairman Arthur H. Gass of the Car Service Division, A.A.R., has recommended to railroad transportation officers the following program for the handling of this year's Christmas-tree traffic: (1) Rough box, open, or flat cars may be used as available, with the understanding that these cars will be loaded to the fullest possible extent in direction of owning railroads as required by Car Service Rules; (2) should both rough box and open top cars be available which can be used in accordance with Car Service Rules, it will be understood that the rough box cars and flat cars should be used in preference to the gondolas. The recommendations were set out in an October 12 circular in which Mr. Gass also emphasized that the railroads are now confronted with a "seriously tight situation as regards gondola cars and also heavy demands throughout the country for box and flat cars."

SUPPLY TRADE

The **Electric Sprayit Company** of Sheboygan, Wis., has taken over complete manufacturing rights, inventory and tooling for the production of the Wilmington line of stationary compressors formerly manufactured by the **Auto Compressor Company,** Wilmington, Ohio.

The following personnel changes have taken place at the **Carnegie-Illinois Steel Corporation's** Gary (Ind.) Works: **J. Norman Quinlan,** division superintendent of the west mills, advanced to assistant to general superintendent of the plant; **Charles J. Hunter,** chief metallurgist and chief inspector, appointed to succeed Mr. Quinlan; **Oscar Pearson,** formerly assistant superintendent of steel production and assistant to division superintendent of steel production and central mills, appointed to replace Mr. Hunter; and **Ragnar Overberg** appointed to succeed Mr. Pearson.

The **American Car & Foundry Co.** has announced the appointment of **Frank B. Powers** as assistant vice-president—production department. Mr. Powers was born in Chicago in 1904 and was graduated from the University of Illinois in 1926 with a B. S. degree in electrical engineering. From 1926 to 1944 he worked with the Westinghouse Electric Corporation, advancing to engineering manager—transportation and generator division, at the East Pittsburgh, Pa., plant. During World War II, Mr. Powers served as overseas traction manager for Westinghouse. Following his association with Westinghouse he was vice-president in charge of operations of Great American Industries, Inc., and, in 1947, he assumed the duties of vice-president in charge of engineering of the Baldwin Locomotive Works, Philadelphia, Pa., the position he held at the time of his recent appointment.



Frank B. Powers

Lewis W. Metzger has been elected executive vice-president of the **Midvale Company.** Mr. Metzger also retains his position as vice-president of the Baldwin Locomotive Works and executive assistant to M. W. Smith, executive vice-president of Baldwin, which appointment was reported in the *Railway Age* of August 21.

Lewis W. Metzger

Frederick W. Klussmann has been appointed engineer of tests of the **Asso-**

ciation of Manufacturers of Chilled Car Wheels, succeeding Samuel C. Prest, who has joined the Griffin Wheel Company. Mr. Klussmann completed his education at the Carnegie Institute of Technology in 1926, after which he entered the chilled car wheel business as a chemist for the Southern Wheel division of the American Brake Shoe Company. In 1928 he became resident inspector at the Southern Wheel plant at Pittsburgh, Pa., and in 1938 he transferred to the wheel association inspection department as a general inspector. In 1941 he was appointed assistant engineer of tests of that department, which position he held up to the time of his present appointment.

A. F. Vinson, formerly assistant production manager, apparatus department, of the General Electric Company, has been appointed manager of the welding divisions, which includes plants at Holyoke, Mass., Fitchburg, and Houston, Tex. Mr. Vinson received an electrical engineering degree from Michigan State College in 1929. Shortly thereafter he joined General Electric and was, successively, process engineer in the manufacturing standard section

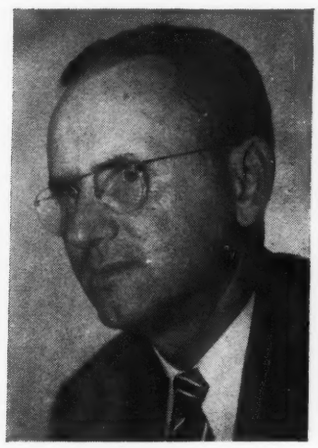
A. F. Vinson

of the fractional-horsepower motor division; section head of planning for d. c. motors; a member of the superintendent's staff, handling methods and production planning; inventory control supervisor of the Fort Wayne, Ind., works; assistant production manager at Fort Wayne; and assistant production manager of the apparatus department. In 1947 he was appointed chairman of the three-man committee in charge of the welding equipment divisions.

Edward Don & Co., sellers of dining car supplies, 2201 South LaSalle street, Chicago, will open new sales and display rooms at that location on October 18.

The National Aluminate Corporation, Chicago, has announced the following changes in titles of personnel: V. E. McCoy, chief engineer, to manager, railroad weed control; and C. A. Brown, railroad service, to mechanical engineer, railroad department.

The Streeter-Amet Company has announced the appointment of Harry K. Franklin, service manager of its Chicago office, as branch manager of the Pitts-



Harry K. Franklin

burgh, Pa., office. In addition to his new duties, Mr. Franklin will continue with complete control of service and maintenance from the Pittsburgh office.

Owen Rice, formerly manager of the threshold department of Calgon, Inc., a subsidiary of the Hagen Corporation, has been elected vice-president in charge of commercial chemical sales, at Pittsburgh, Pa.

A. J. Link, formerly sales representative in Indianapolis, Ind., has been appointed Chicago district sales manager of the Signode Steel Strapping Company. In his new duties Mr. Link will direct sales in Minnesota and Wisconsin as well as the Chicago sales area. The company also has announced that M. C. Carlson, assistant sales manager and formerly Chicago district sales manager, will devote his entire activities to the control of field sales organization.

J. H. Deppeler, chief engineer of the Metal & Thermit Corp., has been granted a leave of absence for the purpose of establishing his own office as a consulting engineer, at 36 West 40th street, New York.

Walter H. Haas, formerly engaged in private contracting work, and J. B. Akers, Jr., formerly with Ralph W. Payne, have organized the firm of Haas & Akers, manufacturers' representatives, with offices in the Dupont Circle building, Washington, D. C.

OBITUARY

William H. Tucker, eastern sales manager of the Vapor Heating Corporation, died suddenly on October 3, at New Rochelle, N. Y. He was 61 years old.

Karl O. Schreiber, vice-president in charge of manufacturing of the International Harvester Company at Chicago, died on October 5 in Evanston hospital, Evanston, Ill.

CONSTRUCTION

Atlantic Coast Line.—Division 4 of the Interstate Commerce Commission has authorized this road to construct and operate a line extending from Four Holes, S. C., to a point near Harleyville, 1.9 miles, to serve two plants—one producing agricultural limestone and the other Portland cement.

Southern.—This road has awarded four contracts for various portions of a project involving the construction of a new railroad bridge over the Cumberland river near Burnside, Ky., to replace an existing structure and for grading and drainage of a 4-mile relocation of the Cincinnati, New Orleans & Texas Pacific line of the Southern system. Low bidders to whom contracts were awarded, and the approximate amounts of the bids, are: The Mt. Vernon Bridge Company, Mt. Vernon, Ohio, for the superstructure of the new bridge ($1,286,000); the Massman Construction Company, Kansas City, Mo., for the substructure of the new bridge ($677,000); and the Oman Construction Company, Nashville, Tenn., and the Moss-Thornton Company, Birmingham, Ala., for the grading and drainage of the 4-mile relocation ($690,000). The project, including the line relocation, will require about two years for completion.

Relocation of the railroad and the construction of a new bridge some 1,400 ft. upstream from the present bridge are made necessary by the federal government's Wolf Creek dam and Cumberland reservoir hydro-electric and flood control project, which will place the present bridge under water when the reservoir is full. The new concrete and steel bridge will be double-tracked and will be 1,360 ft. long, compared with the present single-tracked 1,340 ft. structure. It will be 210 ft. high and the track level will be 108 ft. above the track level of the old bridge. Approximately 7,800,000 lb. of structural steel will be required for the superstructure. The four miles of new double track line will eliminate two tunnels and shorten the road's main line by some 755 ft. Consulting engineers for the new bridge are Modjeski and Masters, Harrisburg, Pa.

Tennessee Central.—Company forces of this road are constructing a brick and frame freight depot, 36 ft. by 244 ft., at Clarksville, Tenn., at an estimated cost of $20,000.

ABANDONMENTS

Missouri & Arkansas.—Overruling an October 6 order by its Division 4, the Interstate Commerce Commission on October 8 extended to and including December 7 the effective date of the division's August 8 order authorizing this road to abandon its entire line of approximately 335 miles and to abandon operations under trackage rights agreements over approximately 30 miles of four other carriers. At the same time, the commission reopened the proceeding for reconsideration and reargument and assigned the case for oral argument on November 12 before the entire commission at its Washington, D. C., offices. The division's August 8 order was reported in *Railway Age* of August 14, page 81.

Postponement of the effective date of the order for at least 120 days from October 9 was sought in a petition filed with the commission by Governor Laney, of Arkansas, among others. The petitioners held that it was "imperative" to the state of Arkansas and particularly to the section served by the M. & A. that every possibility be "fully explored" with a view of restoring operations before the abandonment order became effective. They said that if proposals now being studied are found to be feasible, action would be required by the Arkansas legislature, which does not meet until January 11, 1949.

The abandonment was approved by Division 4 subject to the condition that the line, or any portion thereof be sold to any responsible party offering, within 60 days from the date of the certificate, to purchase the property for continued operation and willing to pay not less than the net salvage value of the property which they may seek to acquire. The total net salvage is estimated by the M. & A. at $2,032,396.

Application has been filed with the Interstate Commerce Commission by:

Clarion River.—To abandon its entire line, extending from Hallton, Pa., to Carman, approximately 11 miles. The application said there has been no need for service on the line since the Susquehanna Chemical Corporation discontinued operation of a plant it formerly maintained at Hallton.

New York Central.—To abandon a line extending from Watertown Junction, N. Y., to Sackets Harbor, approximately 11.4 miles. In support of its application, the road cited the abandonment by the federal government in December, 1945, of an Army installation which formerly received a "large portion" of the inbound traffic handled over the line, and the fact that the Socony Vacuum Oil Company, the principal remaining industry, receives its oil products via water carrier and ships out such products via motor carrier. Most of the other business handled by rail, the applicant said, has gradually been lost to highway competition.

Norfolk Southern.—To abandon that part of its Oriental branch from Bayboro, N. C., to Oriental, 9.5 miles. The applicant told the commission that traffic is "seasonal" and can be handled by motor carriers serving the territory involved.

Springfield Electric.—To abandon a one-mile line in Charleston, N. H. At the same time, the commission authorized the Springfield Terminal, as lessee, to abondon operation of the line. Service over the segment was discontinued in January, 1947.

Division 4 of the I. C. C. has **authorized:**

Delaware, Lackawanna & Western.—To abandon its 3.1-mi. loop track serving Rockaway, N. J., which is about one mile off the main line of the D. L. & W. in the vicinity of Denville.

Union Pacific.—To abandon its Pleasanton branch, extending from a connection with its Loup City branch at Boleus, Neb., to Pleasanton, 22.1 miles. The branch has not been operated since June 21, 1947, when a severe flood damaged many bridges and portions of the track. Detailed estimates submitted by the U.P. showed it would cost about $118,000 to repair the flood damage in addition to $44,000 for restoring old piling in three bridges which escaped damage.

The commission said that while loss of the branch may be "unfortunate" to shippers in the tributary territory, it is evident that the segment could not be operated at a profit even if no expenditures were required for rehabilitation purposes. "A carrier," it said, "should not be required to operate a line indefinitely without sufficient traffic to support it."

Denver & Rio Grande Western.—To abandon a narrow-gage line extending from a point near Sapinero, Colo., to a point near Cedar Creek, 26.6 miles. Portions of the line have been inundated by mud slides in the past several years, and in April of this year the entire segment became unusable. Operation of the line, the commission said, cannot reasonably be resumed unless it is rebuilt at a new location at "considerable expense." Commissioner Mahaffie, dissenting, said he would have denied the application. "Most abandonments are sought because traffic has left the railroad," he commented. "Shippers who do not use a railroad ordinarily cannot make a case for requiring its continuance at a loss. Here that does not appear to be the situation. The shippers show a real need for the service. And they depend on it and use it for their available traffic. Hence there is presented the problem of balancing shipper and community inconvenience and loss against the carrier's loss if the service is required to be continued . . . "

Springfield Terminal.—To abandon approximately 2,000 ft. of track in Springfield, Vt.

Youngstown & Southern.—To abandon that portion of its Negley-New Galilee line extending from Darlington, Pa., to New Galilee, approximately 2 miles, and its entire Leetonia branch, extending from Columbiana, Ohio, to Leetonia, approximately 2.8 miles. The Darlington segment has been out of service since the collapse of a bridge over Beaver Creek in May, 1946. As for the Leetonia branch, the commission said that traffic over that segment is insufficient to warrant keeping it in service.

FINANCIAL

Chesapeake Western. — *Bonds.* — Division 4 of the Interstate Commerce Commission has dismissed, without prejudice, this road's application for authority to exchange $600,000 of its 4 per cent gold bonds, due October 1, 1951, for a like amount of 3 per cent refunding bonds. D. W. Thomas, president of the road, told the commission he had been informed by the Bureau of Internal Revenue that approval of the exchange would result in a tax liability of $200,000. He said he is now awaiting a B.I.R. ruling as to whether there would be any liability if the bonds are reissued in their present form. The road's application was noted in *Railway Age* of September 25, page 72.

Chicago & North Western.—*New Director.*—Frederick O. Bohen, president of the Meredith Publishing Company, of Des Moines, Iowa, has been elected a director of this road.

Columbia, Newberry & Laurens.—*Dividend.*—This road, controlled by the Atlantic Coast Line, paid a dividend of $2 a share on the capital stock on October 15. The previous payment on this issue was $1.50 in 1931.

Missouri Pacific. — *Annual Report.* — Operating revenues of this road last year amounted to $199,622,368, compared with $174,495, 869 in 1946. Operacting expenses totaled $155,122,950, compared with $137,743,369. Fixed charges were $16,827,367, compared with $17,552,590. Net income was $8,271,925, compared with $6,309,122. Current assets at the end of the year were $82,779,796, compared with $72,227,805. Current liabilities were $33,053,224, compared with $27,732,282. Long term debt was $351,252,067, compared with $343,764,000.

Pittsburgh & West Virginia.—*Dividend.*—This road has declared a dividend of $1 a share on its common stock, payable on December 15 to stockholders of record on November 15. The previous payment on this issue was $1.50 a share on April 30, 1931.

St. Louis-San Francisco.—*Acquisition.*—Authority to acquire control of the Alabama, Tennessee & Northern, thereby obtaining a direct entry into Mobile, Ala., is sought in an application which this road has filed with the Interstate Commerce Commission. The A. T. & N. extends 214 miles between Reform, Ala., and Mobile—which also is served by the Southern, Louisville & Nashville and Gulf, Mobile & Ohio—and connects with the Frisco at Aliceville, Ala., 20 miles south of Reform.

The Frisco proposes to acquire all the outstanding capital stock of the A. T. & N., consisting of 12,461 shares of no par value common stock, and to acquire all of the A. T. & N.'s outstanding unpledged general mortgage

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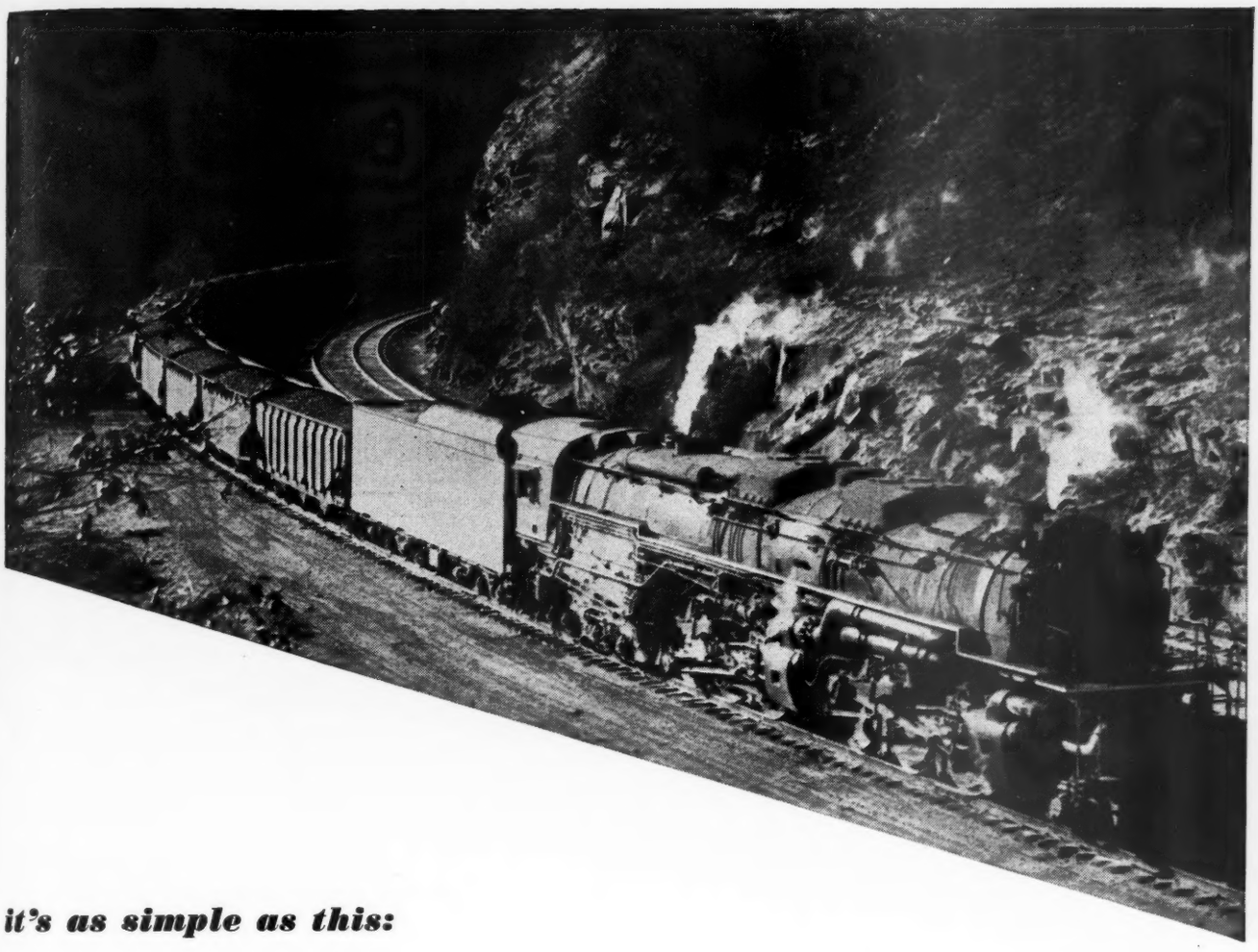

it's as simple as this:

MORE *with* FEWER

Last year, while some 2000 steam locomotives were being retired, the revenue ton-miles moved by steam reached 570 billion.

Here are two apparently opposing facts: The number of steam locomotives on Class I railroads hit a 30-year low. The number of ton-miles moved by these locomotives, on these roads, hit a peace-time high. Obviously the remaining locomotives averaged more time on the road. And, also obviously, the modern portion of that power—both new and rebuilt—raised that average.

It's as simple as that.

We built a substantial number of the modern locomotives that helped set that record. They have proved their ability, with planned scheduling, to stay on the road for 16 and 18 hours at a stretch—and to be ready for reassignment, with planned servicing facilities, in an hour or two. We are continuing to build such locomotives—progressively better, more reliable, and with even greater capacity for work.

LIMA HAMILTON CORPORATION

DIVISIONS: *Lima, Ohio* — Lima Locomotive Works Division; Lima Shovel and Crane Division. *Hamilton, Ohio* — Hooven, Owens, Rentschler Co.; Niles Tool Works Co.

PRINCIPAL PRODUCTS: Locomotives; Cranes and shovels; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

series A 4½ per cent income bonds. The bonds have a total face value of $1,307,100. The Frisco would pay $25 per share for the stock and $650 per $1,000 principal amount for the bonds.

The applicant told the commission that the A. T. & N.'s net railway operating income account showed deficits of $194,736 in 1946, $42,836 in 1947 and $156,275 for the first eight months of 1948.

The A. T. & N., the Frisco said, is confronted with the probability of a bankruptcy proceeding or abandonment of its line because of mounting deficits and inability to secure financial help.

It held that abandonment of the line would result in a loss to the shipping public of an "existing necessary transportation facility."

Southern Pacific. — *Acquisition.* — Division 4 of the Interstate Commerce Commission has authorized this road to acquire, through stock ownership, control of the Union Belt of Oakland, Calif. The latter has been operated by the S.P. since 1910. The S.P. will acquire all the outstanding capital stock of the Union Belt, consisting of 44 shares of the par value of $100 each, for $85,000, subject to certain adjustments.

New Securities

Application has been filed with the Interstate Commerce Commission by:

Chesapeake & Ohio.—To assume liability for $4,200,000 of equipment trust certificates, proceeds of which would be applied toward purchase of 1,100 steel hopper cars and five 1,000-hp. Diesel-electric switching locomotives. The road will buy 775 of the hoppers from the American Car & Foundry Co. at an estimated unit cost of $4,350 and the remainder from the Bethlehem Steel Company at an estimated unit cost of $4,460. The locomotives, to cost $102,819 each, will be acquired from the Electro-Motive Division of the General Motors Corporation. The certicates would be dated November 15, would be sold on the basis of competitive bidding and mature in 10 annual installments of $420,000, starting November 15, 1949.

Chicago, St. Paul, Minneapolis & Omaha.—To assume liability for $2,100,000 of equipment trust certificates, proceeds of which would be applied toward purchase of the following equipment:

	Description and Builder	Estimated Unit Cost
150	70-ton hopper cars (Pullman-Standard Car Manufacturing Company)	$ 4,892
150	70-ton gondola cars (Bethlehem Steel Company)	4,539
200	50-ton box cars (Pullman-Standard)	4,739
2	1,000-hp. Diesel-electric switching locomotives (Baldwin Locomotive Works)	103,115
1	600-hp. Diesel-electric switching locomotive (Baldwin)	80,465

The certificates would be dated December 1 and would be payable serially in equal annual installments of 10 or 15 years, as may be determined upon the receipt of bids. The rate of interest on the certificates would be determined through competitive bidding.

Great Northern.—To assume liability for $12,720,000 of equipment trust certificates, proceeds of which would be applied toward purchase of the following equipment, estimated to cost approximately $15,900,000:

	Description and Builder	Estimated Unit Cost
1,500	50-ton steel-framed, double-sheathed box cars (applicant's own shops)	$ 5,400
500	50-ton steel gondola cars (Pullman-Standard Car Manufacturing Company)	6,200
200	50-ton steel gondola cars (American Car & Foundry Co.)	5,400
100	70-ton steel covered hopper cars (Pullman- Standard)	6,500
75	70-ton steel covered hopper cars (A.C. F.)	5,900
1	6,000-hp. Diesel-electric freight locomotive (American Locomotive Company)	617,500
10	1,500-hp. Diesel-electric road switching locomotives (American Locomotive)	150,000
4	1,000-hp. Diesel-electric switching locomotives (Electro-Motive Division, General Motors Corporation)	102,500

The certificates, to be sold on the basis of competitive bidding, would be dated September 1 and mature in 30 semi-annual installments of $424,000, starting March 1, 1949.

Pennsylvania. — To assume liability for $6,487,000 of general mortgage bonds which its lessor, the United New Jersey Railroad & Canal, seeks commission authority to issue and deliver to it. The bonds would be dated October1 and would mature October 1, 1973, with the rate of interest to be determined by competitive bidding. The proposed bonds would be issued in payment for a like amount of general mortgage 3 per cent bonds which mature in 1984. The Pennsylvania said it advised the lessor that the bonds can be sold to "better advantage" and "upon better terms" should they mature not later than October 1, 1973.

Division 4 of the I. C. C. has **authorized:**

Southern.—To assume liability for $8,700,000 of series 00 equipment trust certificates, proceeds of which will be applied toward purchase of equipment estimated to cost $11,600,000, as described in *Railway Age* of September 18, page 82. The certificates will be dated October 15 and will mature in 20 semi-annual installments of $435,000, starting April 15, 1949. The report also approves a selling price of 99.405 with a 2¼ per cent interest rate, the bid of Halsey, Stuart & Co., and associates, on which basis the average annual cost will be approximately 2.38 per cent. The certificates were reoffered to the public at prices yielding from 1.5 per cent to 2.5 per cent, according to maturity.

Dividends Declared

Chicago & North Western.—5% preferred A, $2.50, payable November 1 to holders of record October 15.

Piedmont & Northern. — 75¢, payable October 20 to holders of record October 5.

Pittsburgh & West Virginia. — (resumed) $1.00, payable December 15 to holders of record November 15.

Average Prices Stocks and Bonds

	Oct. 13	Last week	Last year
Average price of 20 representative railway stocks	48.21	48.29	48.67
Average price of 20 representative railway bonds	88.58	88.75	87.33

RAILWAY OFFICERS

EXECUTIVE

Joseph F. Scherman, superintendent of organization of the Railway Express Agency at Chicago, has been appointed assistant to vice-president at that point. He is succeeded by **William C. Searight,** superintendent of the firm's Montana division at Spokane, Wash. A sketch of Mr. Searight's career appeared in the *Railway Age* of September 4, in connection with his appointment to the Spokane post.

L. J. Bachman, whose promotion to assistant to president and assistant secretary of the Union Pacific, at Omaha, Neb., was reported in the *Railway Age* of September 4, was born at Council Bluffs, Iowa, on February 27, 1903. Mr. Bachman entered U. P. service in 1922 as a stenographer in the office of the operating vice-president, advancing in 1929 to secretary to assistant to operating vice-president and in 1934 to assistant statistician in the office of operating vice-president. He was further advanced in 1937 to statistician in the president's office and in 1944 to office assistant to executive vice-president and assistant secretary. He was serving as office assistant to vice-president and assistant secretary at the time of his recent promotion.

L. J. Bachman

J. G. Morrison, assistant vice-president of the Northern Pacific at St. Paul, Minn., has been advanced to vice-president in charge of traffic at that point, succeeding the late **Roy Wallace Clark,** whose death was reported in the *Railway Age* of October 9. A photograph of Mr. Morrison and a sketch of his career appeared in the *Railway Age* of December 20, 1947, page 73, in connection with his appointment as assistant vice-president.

G. B. Henderson, whose appointment as vice-president—personnel, Chicago & Eastern Illinois, at Chicago, was reported in the *Railway Age* of Septem-

News Department continued on next left-hand page

IN MODERNIZING STEAM MOTIVE POWER

MANY railroads are installing Security Circulators in their existing locomotives to increase steaming efficiency and to decrease boiler maintenance.

Steaming performance is improved because the additional evaporating surface aids the locomotive to get up steam more rapidly, while the quickened flow of water from the side water-legs (through the Circulators) over the crown sheet helps to maintain maximum boiler output.

Boiler maintenance is reduced because the Security Circulators definitely lessen honeycombing, flue plugging and cinder cutting. They also furnish an ideal support for a 100% brick arch and prolong the life of the brick.

SECURITY CIRCULATOR DIVISION

AMERICAN ARCH COMPANY INC.

NEW YORK • CHICAGO

ber 18, was born at Fort Atkinson, Iowa, and began his career with the C. & E. I. as a crew caller at St. Elmo, Ill., in 1903. He served as station and yard clerk there until 1905, when he went to Salem, Ill., where he held positions as trainmaster's clerk and clerk in the office of superintendent. In 1910 he was advanced to chief clerk to superintendent at Salem, where he remained

G. B. Henderson

until 1916, when he was transferred to Danville, Ill. Mr. Henderson was appointed trainmaster there in 1920, which position he held until 1930, when he was transferred to Villa Grove, Ill. When the position of trainmaster at Villa Grove was abolished in 1933, he was appointed general yardmaster. In 1938 he became agent-yardmaster in charge of the southern Illinois coal fields on the C. & E. I. line, with headquarters at West Frankfort, Ill. Mr. Henderson was advanced to assistant general manager on January 1, 1946, and to general manager in January, 1947. He was serving in the latter position at the time of his recent promotion.

William C. Hilton, assistant to the vice-president, operating department, Atchison, Topeka & Santa Fe, with headquarters at Chicago, has retired. Mr. Hilton, whose title was erroneously given as assistant vice-president in the *Railway Age* of October 9, was born on September 30, 1878, at Topeka, Kan. He attended public schools in that city and received a degree in law from the Chicago-Kent College of Law in Chicago. Mr. Hilton entered Santa Fe service in the freight auditor's office at Topeka on a temporary basis in 1895, and re-entered service with the company in 1898 as a clerk in the same office. He served in various positions until 1909, when he was appointed chief clerk to the general manager. Mr. Hilton was transferred in the following year to the office of the vice-president, operating department, at Chicago, advancing in 1924 to assistant to the vice-president, the position he held at the time of his retirement.

James M. Moudry, whose promotion to vice-president in charge of operation, Litchfield & Madison, at Edwardsville, Ill., was reported in the *Railway Age* of September 4, was born at Montgomery, Minn., in 1899. Mr. Moudry began his railroad career in 1914 as a station helper with the Minneapolis, St. Paul & Sault Ste. Marie at Wimbledon, N. D., and later worked as an operator at various points on the Soo Line's Minnesota division. He joined the Chicago, Milwaukee, St. Paul & Pacific in 1916, serving as agent-operator at various points until 1921, when he was advanced to train dispatcher. He subsequently served as chief dispatcher and trainmaster, and as assistant superintendent at Milwaukee, Wis. On August 1, 1947, he resigned the latter position to join the L. & M. as special representative to the president, and later in that month he was appointed general manager. Mr. Moudry was serving as general manager at the time of his recent advancement.

John R. Marra, whose appointment as vice-president of the Western department of the Railway Express Agency at San Francisco, Cal., was reported in the *Railway Age* of September 25, began his career in the express business in May, 1916, as a scaleman and later became correspondent in the express office at Utica, N. Y. Following service in the United States Navy during the first World War, he returned to express work in various capacities at Albany, N. Y., and Rochester, becoming chief clerk to the superintendent at

John R. Marra

Rochester in December, 1928. In January, 1935, Mr. Marra became chief clerk to the president at New York and in May, 1937, was appointed superintendent of the Buffalo-Erie division at Buffalo, N. Y. In October, 1940, he was recalled to the president's staff at New York as chairman of the Standard Practices Committee and later as executive assistant to the president. On January 1, 1948, Mr. Marra was promoted to general manager of the Eastern Lakes department at Cleveland, Ohio, transferring to the Northeastern department at Boston, Mass., a few months later.

FINANCIAL LEGAL and ACCOUNTING

B. Frank Russell, whose retirement as auditor of freight accounts of the Louisville & Nashville, at Louisville, Ky., was reported in the *Railway Age* of September 11, is a native of Charleston, Ind., and attended the public schools at Jeffersonville, Ind. He began his railroad career with the Pennsylvania at Shelbyville, Ind., in 1904, and worked later at both Jeffersonville and Louisville. Mr. Russell joined the L. & N. in 1906 as a rate clerk in the office of the auditor of receipts, which later became the office of the auditor of freight accounts. He was advanced to chief rate clerk in 1918, to general chief clerk in 1924, and to assistant auditor of freight accounts in 1929. He had served as auditor of freight accounts since April 1, 1934.

David A. Lerch, assistant general land and tax agent of the Erie, has been promoted to general land and tax agent, with headquarters as before at Cleveland, Ohio, to fill the vacancy created by the death on August 14 of **G. R. Roth. F. D. Halter,** land agent, has been advanced to assistant general land and tax agent, with headquarters as before at Cleveland. **W. A. Harrison,** who has been connected with the Erie since 1942, has been appointed land agent.

M. G. Seigler has been appointed assistant to comptroller of the Atlantic Coast Line, with headquarters at Wilmington, N. C.

OPERATING

John H. Fish, whose retirement as superintendent of the Louisville & Nashville, at Evansville, Ind., was reported in the *Railway Age* of October 9, was born on January 11, 1882, at Fountain Head, Tenn. Mr. Fish first entered railroad service in 1898 as a telegraph operator on the L. & N.'s Nashville division. He was employed for a brief time by the Oliver Coal & Coke Co., Uniontown, Pa., but in December, 1901, returned to the L. & N. as a telegraph operator on its Cumberland Valley division. Mr. Fish subsequently served with the L. & N. as dispatcher, chief dispatcher and night chief dispatcher at various points being advanced in 1914 to assistant trainmaster and in 1918 to trainmaster at Evansville. He was advanced to assistant superintendent at the latter point in 1929 and to superintendent there in 1937. He was holding the latter position at the time of his retirement.

TRAFFIC

L. C. Howe, whose appointment as general freight agent of the Indiana Harbor Belt, the Chicago Junction and the Chicago River & Indiana, at Chicago, was reported in the *Railway Age* of September 11, was born on August

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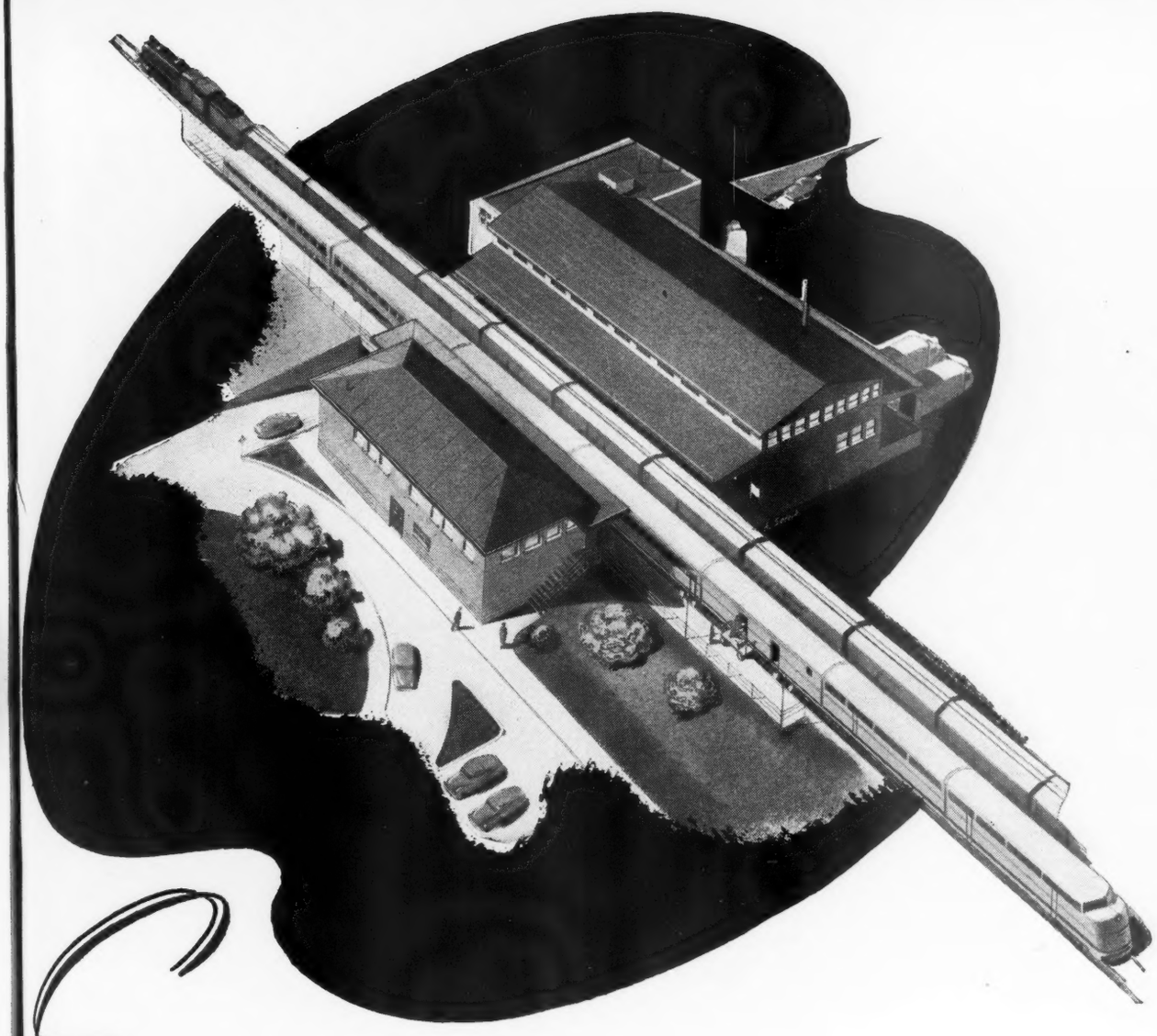


Smoother safer journeys both for passengers and freight

Whether it is handling a long, heavy-tonnage freight or a string of modern passenger cars, Westinghouse 24RL locomotive brake equipment helps assure the smooth, safe journeys that win and hold patronage.

Any desired combination of functions can be provided by merely combining standard parts. This simplifies installation and servicing, and permits easy conversion if future changes in locomotive assignment should make this desirable. Operating characteristics provided by each combination are matched exactly to the need, provide the ultimate in positive, dependable train control. The 24RL is the answer to modern requirements.

Brakes are Basic to Railroad Progress

Westinghouse Air Brake Co.

WILMERDING, PA.

11, 1892, in Aurora, Ill. He studied transportation and attended night classes in law at Northwestern University, and took a correspondence course in transportation at LaSalle Extension University. Mr. Howe entered the service of the New York Central in 1911 as a stenographer in the office of freight traffic manager at Chicago, and later served in the same capacity in the office of traffic manager. Following army service in World War I, he returned to the New York Central as a clerk in the office of assistant general passenger agent at Chicago. He subsequently served as rate clerk in the office of the general freight agent at Cleveland, Ohio, and in various secretarial and clerical capacities at Chicago. He was appointed general agent at Toledo, Ohio, in 1929, and in 1932 he became division freight agent at Kankakee, Ill., for the Illinois and Danville divisions of the N.Y.C. and the Kankakee Belt. In the following year he was appointed division freight agent for the Western division of the N.Y.C., with headquarters at Chicago. With consolidation of the freight traffic departments of the various N.Y.C. lines into the N.Y.C. System in June, 1935, he was re-appointed division freight agent, which post he held until his recent appointment.

Samuel H. Lloyd has been appointed general agent of the Illinois Terminal at Chicago.

H. G. Smith has been appointed to the newly created position of assistant general freight and passenger agent of the Missouri-Kansas-Texas of Texas, with headquarters at Wichita Falls, Tex.

Arthur A. Metz, district freight agent of the Pennsylvania at Milwaukee, Wis., has been appointed industrial agent at New York, and **Charles A. Fritzson,** assistant manager of express and milk traffic at Philadelphia, Pa., has been appointed district freight agent at Trenton, N. J.

M. T. Delabar, assistant district manager of the Norfolk & Western's coal bureau at Chicago, has been appointed manager of the coal bureau at Winston-Salem, N. C., succeeding **G. A. Morris,** who has resigned to become district manager of the Virginia Smokeless Coal Company's office in Cincinnati, Ohio. Mr. Delabar's successor is **Carey A. Maynard, Jr.,** stenographer-clerk in the coal bureau at Chicago.

George D. Davis, district manager of the Car Service division of the Association of American Railroads at Omaha, Neb., has been transferred to Detroit, Mich., to succeed **R. D. Rifenburgh,** whose death on September 30 was reported in the *Railway Age* of October 9. **Thomas W. Flickinger,** assistant manager of the A. A. R. Refrigerator Car section at Chicago, has been named district manager of the Car Service division at Omaha.

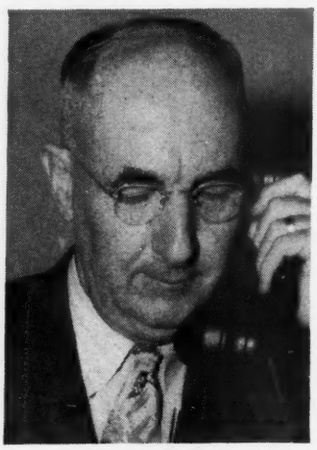
MECHANICAL

Harry M. Wood, whose promotion to assistant chief of motive power—car of the Pennsylvania at Philadelphia, Pa., was reported in the *Railway Age* of October 9, was born at Altoona, Pa., on June 4, 1901, and was graduated from Pennsylvania State College. Mr. Wood first entered the service of the Pennsylvania as a clerk in the Altoona shops on July 7, 1919, and became a machinist apprentice on June 15, 1922. After several promotions at Altoona, Harrisburg and Pittsburgh, Pa., Mr. Wood was advanced to master mechanic of the Long Island on August 1, 1937. He returned to the Pittsburgh division of the P.R.R. in

Harry M. Wood

May, 1941, as acting master mechanic and seven months later was appointed master mechanic of the Western Pennsylvania general division, consisting of the Pittsburgh, Conemaugh and Monongahela divisions. On February 16, 1942, Mr. Wood was promoted to superintendent of the Logansport (Ind.) division and was further advanced on July 1, 1943, to general superintendent of motive power of the Western region at Chicago, in which position he served until his recent promotion to assistant chief of motive power—car.

Arthur Selbee, who has been appointed superintendent of motive power and car equipment of the Central Vermont at St. Albans, Vt., as reported in the *Railway Age* of October 9, is a native of Battle Creek, Mich. Mr. Selbee entered railway service with the Grand Trunk Western lines of the Canadian National in 1910 as a machinist apprentice at Battle Creek. After five years of apprentice service he became enginehouse foreman at Durand, Mich., and in 1918 was named assistant foreman of the erecting shop at Battle Creek. From 1924 to 1932 he served as a locomotive inspector, working out of Battle Creek, supervising construction of locomotives for system lines in the shops of the American Locomotive Works at Schenectady, N. Y.; the Baldwin Locomotive Works at Philadelphia, Pa., and the Kingston Locomotive Works at Kingston, Ont. In 1932 he became machine shop foreman, Grand Trunk Western, at Battle Creek and was promoted to shop superintendent there in



Arthur Selbee

1945, which position he held until his recent promotion to superintendent of motive power and car equipment of the Central Vermont.

ENGINEERING and SIGNALING

V. R. Walling, whose promotion to chief engineer of the Chicago & Western Indiana and Belt of Chicago, with headquarters at Chicago, was reported in the *Railway Age* of October 2, was born on May 24, 1880, at Tripoli, Iowa. He received his higher education at Kansas University and entered railroad

V. R. Walling

service in 1901 with the Cananea Consolidated Copper Company's Railway at Cananea, Sonora, Mex. Mr. Walling subsequently served as instrumentman with the Southern Pacific and held various positions with Cananea Consolidated until 1912, when he joined the C. & W. I. as assistant engineer at Chicago. In 1915 he was appointed principal assistant engineer in charge of construction, track elevation and main-

News Department continued on next left-hand page

POWER CONSERVER

Anytime, anywhere, that you see a steam locomotive doing its job, there is a better than even chance of being right if you assume that its valve and cylinder bushings, packing rings, or other vital parts are made from Hunt-Spiller Gun Iron. This is because most important railroads have standardized on this dependable material for many years. They know its superior characteristics; its long life; its contribution to higher availability and lower maintenance.

Hunt-Spiller are exclusive railroad sales representatives for Double Seal Piston Rings made for Diesel and other services. Double Seal rings are cast from Hunt-Spiller *Air Furnace* Gun Iron.

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Cylinder Bushings	Valve Bull Rings	Dunbar Sectional Type Packing	Light Weight Valves
Cylinder Packing Rings	Crosshead Shoes	Duplex Sectional Type Packing for Cylinders and Valves	Cylinder Liners and Pistons for Diesel Service
Pistons or Piston Bull Rings	Hub Liners	(Duplex Springs for Above Sectional Packing)	Cylinder Snap Rings
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Valve Packing Rings	Floating Rod Bushings		

"AIR FURNACE PROCESS" HUNT SPILLER GUN IRON HSGI SEALS THE WALL SEALS THE GROOVE DOUBLE SEAL RING CO.

tenance, and in 1933 he was promoted to engineer maintenance of way for the C. & W. I. and the Belt of Chicago. From 1940 to 1944 he served as superintendent of the C. & W. I., advancing in the latter year to assistant chief engineer of the two roads. Mr. Walling was serving in the latter position at the time of his recent appointment as chief engineer.

C. A. Roberts, chief draftsman in the structural department of the Erie at Cleveland, Ohio, has been appointed engineer of structures, succeeding **Alfred A. Visintainer,** whose death was reported in the *Railway Age* of October 2. Mr. Roberts is succeeded by **B. J. Shadrake,** chief structural designer.

Dana Oliver Lyle, valuation engineer of the Pennsylvania at Philadelphia, Pa., whose retirement was reported in the *Railway Age* of October 9, was born at Pomeroy, Ohio, on September 2, 1878. Mr. Lyle was graduated as a civil engineer from Ohio Northern University in 1903 and entered railroad service with the Pennsylvania lines west of Pittsburgh as a draftsman in the real estate department on April 28, 1903. Two years later he was transferred to the maintenance of way department and had charge of various construction and maintenance projects on the Marietta, Toledo, Logansport and Pittsburgh (now Panhandle) divisions. Since 1914 Mr. Lyle has been connected with the valuation department. In the capacity of assistant engineer he had direct charge, under the direction of the valuation engineer, of the company's participation in the inventories and cost analyses (for the Western lines) required by the Federal Valuation Act. On March 1, 1920, he was appointed assistant valuation engineer at Pittsburgh, Pa., transferring to Philadelphia in July, 1924. Mr. Lyle was promoted to valuation engineer on December 1, 1935, in which capacity he served until his retirement.

Jay Boyd Myers, engineer roadway and track of the Baltimore & Ohio at Baltimore, Md., retired on July 31 after more than 47 years of service in the maintenance of way department. Mr. Myers was born on August 4, 1878, and was graduated from Pennsylvania State College, Meadville, Pa., as a civil engineer in June, 1900. Shortly after graduation he accepted a position as assistant chief engineer of the city of Meadville and later was connected with the Pittsburgh Bridge Company. Mr. Myers entered the service of the Baltimore & Ohio as rodman at Pittsburgh, Pa., on April 1, 1901. Following various promotions, he was appointed assistant division engineer at Pittsburgh in May, 1903, transferring to Cumberland seven months later. He was promoted to division engineer of the Shenandoah division in August, 1907, transferring to the Cumberland division the following month. He held the latter position until April, 1914, when he became district engineer maintenance of way of the Old Main Line district, comprised, at that time, of the Philadelphia, Baltimore, Shenandoah and Cumberland divisions. In July, 1920, he was appointed engineer roadway and track on the staff of the chief engineer maintenance.

SPECIAL

E. C. Gegenheimer, assistant to the general manager of the Eastern region of the Pennsylvania, with headquarters at Philadelphia, Pa., has been appointed assistant chief of personnel, with the same headquarters. **J. I. Patin,** chief clerk, personnel department, at Philadelphia, has been appointed superintendent, labor and wage bureau, Central region, at Pittsburgh, Pa.

Herbert L. Baldwin, publicity manager of the Boston & Maine and the Maine Central, with headquarters at Boston, Mass., and Portland, Me., has resigned from the service of the two roads.

OBITUARY

R. L. Schmid, late chief engineer of the Nashville, Chattanooga & St. Louis at Nashville, Tenn., whose death was reported in the *Railway Age* of September 4, was born in Louisville, Ky., on March 20, 1886. Mr. Schmid was graduated by the College of Civil Engineering at the University of Kentucky in 1910, and, prior to that time, had begun his railroad career as a rodman on the Louisville & Nashville. In 1909 he joined the engineering department of the Pennsylvania Tunnel & Terminal, a Pennsylvania subsidiary, and in the following year he was employed in the

R. L. Schmid

engineering department of the L. & N. He joined the N. C. & St. L. in 1915 as pilot on valuation work, advancing to resident engineer on construction in 1916, to assistant engineer with special assignments in 1918 and to assistant division engineer on the Chattanooga division in 1919. Mr. Schmid was transferred to the Atlanta division in 1920, remaining on that division until 1926, at which time he became assistant to general manager at Nashville. He was appointed principal assistant engineer in 1939 and had served as chief engineer since January 1, 1940.

Frank Witcher McCullough, assistant to president of the Chesapeake & Ohio at Huntington, W. Va., died on October 6 of a heart attack at the Hotel Ambassador, New York, where he was attending a meeting of the National Coal Association. Mr. McCullough was born at Huntington, W. Va., on May 3, 1889, and attended Bingham Military School, Asheville, N. C., and West Virginia University, where he received a degree in law in 1910. He engaged in the practice of law in Huntington, previous to serving as Assistant U. S. Attorney, and Acting U. S. Attorney, Southern District, West Virginia, from 1913 to 1921. Subsequently, he returned to private practice and from 1933 to 1939 he held such positions as West Virginia N. R. A. compliance director; West Virginia state director of the National Emergency Council; West Virginia W. P. A. Administrator; Federal Housing administrator and secretary of the National Bituminous Coal Commission. Mr. McCullough joined the Chesapeake & Ohio in July, 1939, as assistant to vice-president and in September, 1945, was named assistant to president, with headquarters at Huntington.

Clark Dillenbeck, who retired in July, 1938, as chief engineer of the Reading at Philadelphia, Pa., died on October 9 at his home in Plainfield, N. J. He was 82 years old.

A. Blake Chown, chairman of the Trunk Line-Central Passenger Association at New York, died at his home in East Orange, N. J., on October 10, after a long illness. Mr. Chown was born at Belleville, Ont., Canada in 1887 and entered railroad service in 1907 as ticket clerk with the Grand Trunk at Belleville. He became soliciting passenger agent at Toronto, Ont., in 1911 and was appointed traveling passenger agent at Pittsburgh, Pa., in 1913, transferring to New York in June, 1918. Six months later Mr. Chown became acting general agent, passenger department, and in March, 1919, was promoted to general agent, passenger department, Grand Trunk. In July, 1920, he was appointed general agent, passenger department, Canadian National-Grand Trunk and in December, 1921, became assistant general passenger agent of the Grand Trunk at Chicago, being promoted to general passenger agent in May, 1923. Mr. Chown was appointed passenger traffic manager of the Grand Trunk Western at Chicago in January, 1930, and became chairman of the Trunk Line-Central Passenger Association at New York on June 15, 1943.

News Department continued on next left-hand page

Complete Protection
for hand thrown switches with Racor switch point locks

Main line facing point switches can positively be held in a closed position — regardless of failure or damage of any part of the switch throwing mechanism.

Racor Switch Point Lock operates independently of the switch stand and is protected from damage because all essential working parts are installed below the top of the ties. Adjustable lock rod permits easy and accurate installation of these locks to any design of switch or switch stand. Will not interfere with normal operation of stand as it can be released by slight foot pressure on a conveniently located treadle.

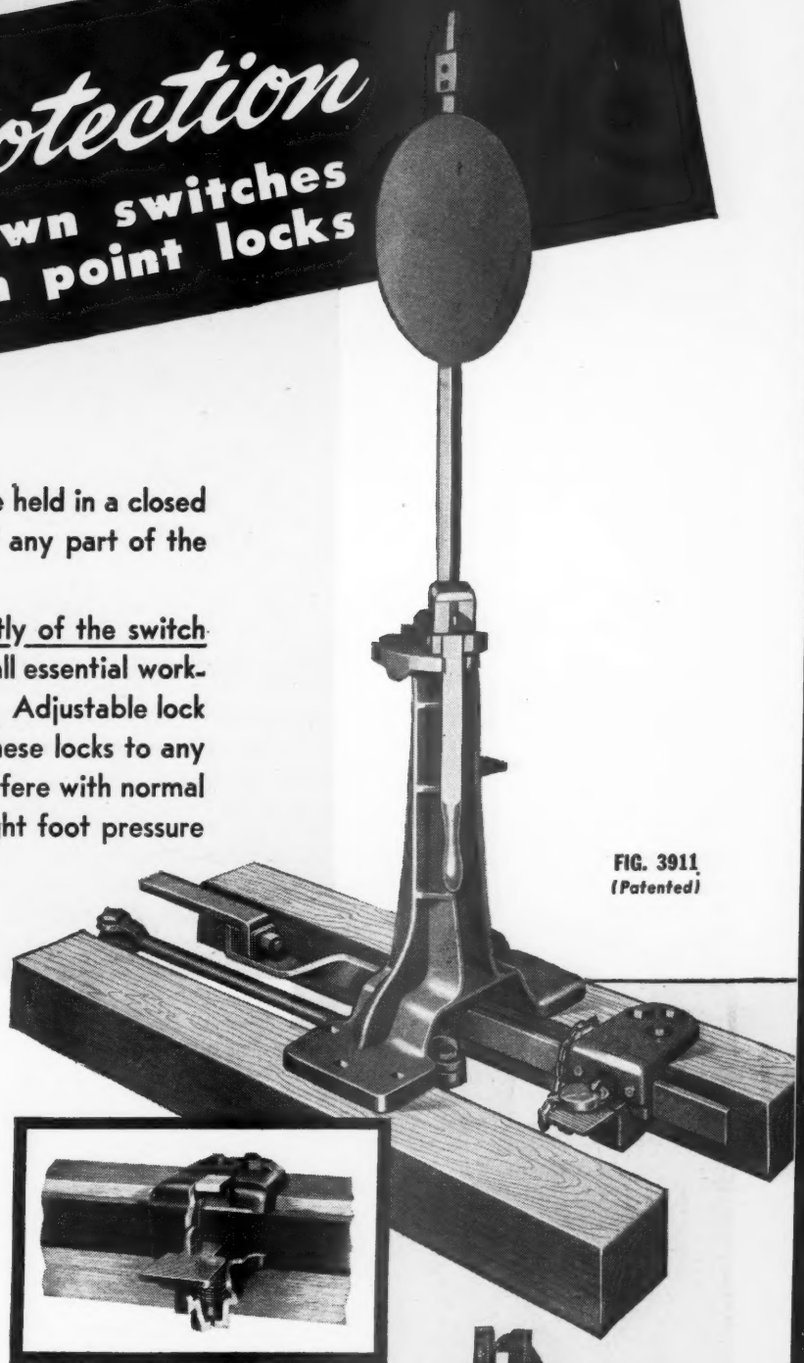

FIG. 3911
(Patented)

TWO STYLES AVAILABLE

Fig. 3911, for use with all types of column throw stands. Note how lockrod is securely engaged in lock treadle. Hand lever may also be padlocked if desired. Fig. 3912, for use with all types of ground throw switches. On this type of lock, one padlock provides positive locking of both lockrod and hand lever.

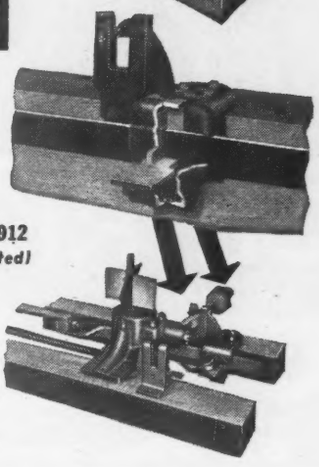

FIG. 3912
(Patented)

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REVERSIBLE MANGANESE STEEL CROSSINGS
SAMSON SWITCH POINTS
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General News

(*Continued from page* 83)

Accident Reporting Requirements Are Modified by Commission

The Interstate Commerce Commission has modified, effective January 1, 1949, its "Form T"—which provides for the reporting of train and train-service accidents—so as to eliminate therefrom those provisions requiring (1) the names and addresses of persons killed or injured and (2) all information relating to the place of the accident except the state in which it occurred. Meanwhile, the modifying order requires railroads to keep a record of the name and address of each person killed or injured and of the precise location at which the accident occurred—such information to be "at all times accessible to this commission."

Braden Outlines "Sound Rate Policy" in Letter to I. C. C.

Charles W. Braden, general traffic manager of the National Distillers Products Corporation, in a recent letter to W. P. Bartel, secretary of the Interstate Commerce Commission, has taken the "rather unusual" action of "asking the commission to support in principle" a transportation policy that he has outlined as "sound and constructive."

Mr. Braden's letter was written as a protest against the action of the commission in suspending a proposed reduction in westbound transcontinental carload rates on alcoholic liquors.

The tariffs proposing the reduction were filed by the railroads to meet truck competition, which first became a serious factor in transcontinental liquor traffic after Ex Parte 166 rate increases went into effect. The suspension, as is customary in such cases, was ordered by the commission on the protest of the Intercoastal Steamship Freight Association, despite the fact, which Mr. Braden points out, that it "is harmful to the transcontinental rail carriers and of no gain or benefit to the intercoastal steamer lines."

"The protestant intercoastal steamship lines," Mr. Braden writes, "cannot expect to handle any of the traffic . . . in competition with the transcontinental motor common carriers unless they too adjust their rates to meet competitive conditions."

"The general rate level," he adds, "is affected by a proper balance of . . . inbound and outbound tonnage. . . . If one form of transportation, the railroads, are to handle only the lower rated inbound tonnage, and the higher rated outbound tonnage, or 'cream' . . . is to be handled by a competing form of transportation, then the general level of rail rates must in due time be increased.

"The railroads . . . have simply endeavored to meet the rates of the transcontinental motor common carriers.

Should a barrier be placed against the railroads which would forbid such action to be taken, then we must become deeply concerned over the fact that the real independence, responsibility and integrity of private management of railroads (and water carriers as well) is seriously threatened."

Emergency Board Report

The National Mediation Board and the White House have been advised of the settlement through mediation of a dispute between the New Orleans Public Belt and certain of its employees represented by the Brotherhood of Locomotive Firemen & Enginemen and the Brotherhood of Railroad Trainmen. Settlement of the controversy was confirmed in a telegram received from H. H. Schwartz, chairman of an emergency board which President Truman created to investigate the dispute after the employees involved had voted to strike on September 7.

The dispute involved a claim for retroactive pay by a fireman whose reinstatement to service was ordered by the National Railroad Adjustment Board. The fireman was discharged from the service in 1946 after he allegedly gave erroneous testimony with respect to an accident in which he was involved.

The carrier refused to pay the monetary award unless the employee procured a court judgment in his favor; but it did agree to submit the issue to a board of arbitration. The unions, on the other hand, declined to take the case to court and resorted instead to their "economic power" to strike and tie up the road until the award was complied with in all respects.

In its discussion of the case, the emergency board commented in part that neither the unions nor the carrier have shown the "proper regard" for the public welfare nor have they demonstrated a willingness to fully comply with the R. L. A. The board said there was no justification for the road's failure to immediately reinstate the employee with full seniority rights in compliance with the Adjustment Board order.

In addition to Mr. Schwartz, other members of the board were Floyd McGown and A. L. Coffey, attorneys, of Boerne, Tex., and Tulsa, Okla., respectively.

Transcontinental Bus System Gets Two D. & R. G. W. Subsidiaries

Division 4 of the Interstate Commerce Commission has authorized the Transcontinental Bus System, Inc., of Dallas, Tex., to expand its network of motor coach routes to include Pueblo, Colo., Denver, and Salt Lake City, Utah, by acquiring control of the Rio Grande Motor Way, Inc., a wholly-owned subsidiary of the Denver & Rio Grande Western, and the Denver Colorado Springs Pueblo Motor Way, Inc. The latter has been controlled jointly by the D.& R.G.W. and the Burlington

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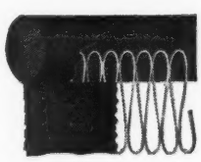
Inner-seal has other applications in the railroad field. It is successfully used on diesel and electric locomotives to protect costly motors and allied equipment from dirt and dampness. It seals refrigerator car doors so effectively that cold and evaporation losses drop to a bare minimum, thus safeguarding the transport of highly perishable products.

Bridgeport Inner-seal Weather Stripping is made in many standard sizes and colors or it may be modified especially for your requirements. It will pay you to get full details. Write today for data sheet and samples.



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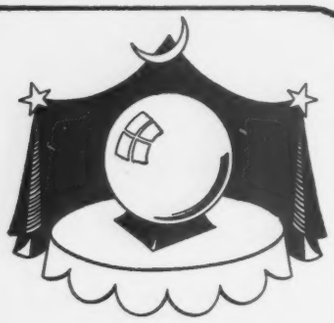

Predictable Castings

Most of the "guess" has been taken out of foundry work; cast iron has become predictable. Improvements are due to better control at all stages of foundry practice, and to the use of alloy irons.

Predictable Molybdenum high strength cast iron is used for engine cylinders, cylinder blocks, liners, brake drums and other castings where strength and toughness, together with good wear resistance and heat resistance, are paramount.

Molybdenum is a popular alloying element in high duty irons because of its positive and predictable improvements; the improvements far outbalance the additional cost.

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The transactions were occasioned, the commission said, by the desire of the D.& R.G.W. to withdraw from the motor bus business, and by the desire of Transcontinental to fill in the gap in its operations between Denver and Pueblo, on the east, and Salt Lake City on the west. All of the motor carriers involved in the proceeding, it said, are members of the National Trailways Bus System.

The commission went on to note that, for several years, a coordinated through service interchange of buses has been provided by Trailways' companies between Texas points and Pueblo and Denver. Consummation of the transactions, the commission continued, would assure continuance of that service, would permit its extension to Salt Lake City and would permit more efficient and dependable operations "with resulting benefits to the traveling public."

Harkins, B. of L. E. Officer, Named Member of Productivity Council

Appointment of T. J. Harkins, assistant chief engineer of the Brotherhood of Locomotive Engineers, to membership on the Anglo-American Council on Productivity has been announced by Paul G. Hoffman, Administrator of the Economic Cooperation Administration. Mr. Harkins is the fourth labor leader to be named to the council and completes the list of American representatives. P. D. Reed, chairman of the General Electric Company, heads the American delegation to the council.

The full council will hold its first meeting in London starting October 25, at which time it will review the current production situation in the British industries. British labor leaders and industrialists are expected to come to this country at a later date to make "on-the-spot studies" of production methods.

New T. & P. Reservation Set-Up

The Texas & Pacific has established a centralized reservation bureau in Dallas, Tex., designed to speed up confirmation of sleeping car reservations and to simplify the procedure for obtaining Pullman accommodations in the Dallas-Fort Worth area. A direct telephone line connects the passenger offices in the two cities, permitting the Fort Worth agent to obtain space confirmation quickly from the central bureau in Dallas. Will-call desks have been established in both cities.

Coincident with the inauguration of the centralized bureau was the revamping of the Dallas city ticket office, headquarters of the new bureau. The office now has extra counter space and a new lighting system and on its walls are murals of scenes along the T. & P. lines.

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